HVACR TOOLS & TEST EQUIPMENT

PRODUCT CATALOG

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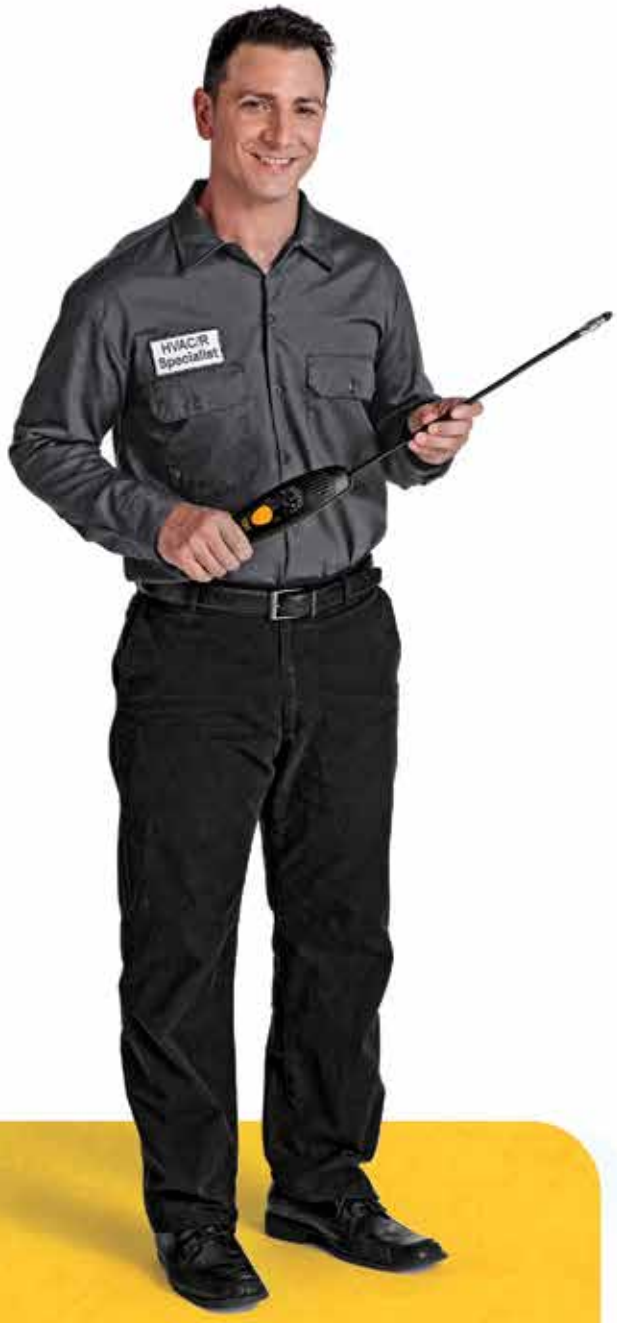

The Leader in **Intuitive Innovation.**

You already work hard. CPS tools are designed to help you work smarter, too—and to get more done, quickly. And while everybody wants to be “innovative,” few launch as many new products each year or can use “patent pending” as a descriptor as often. That’s because we make most of what we design at our 100,000 sq. ft. headquarters in Hialeah, Florida. So you get American engineered tools and equipment—at reasonable pricing. Use your hands. Use your head. CPS designs for both.

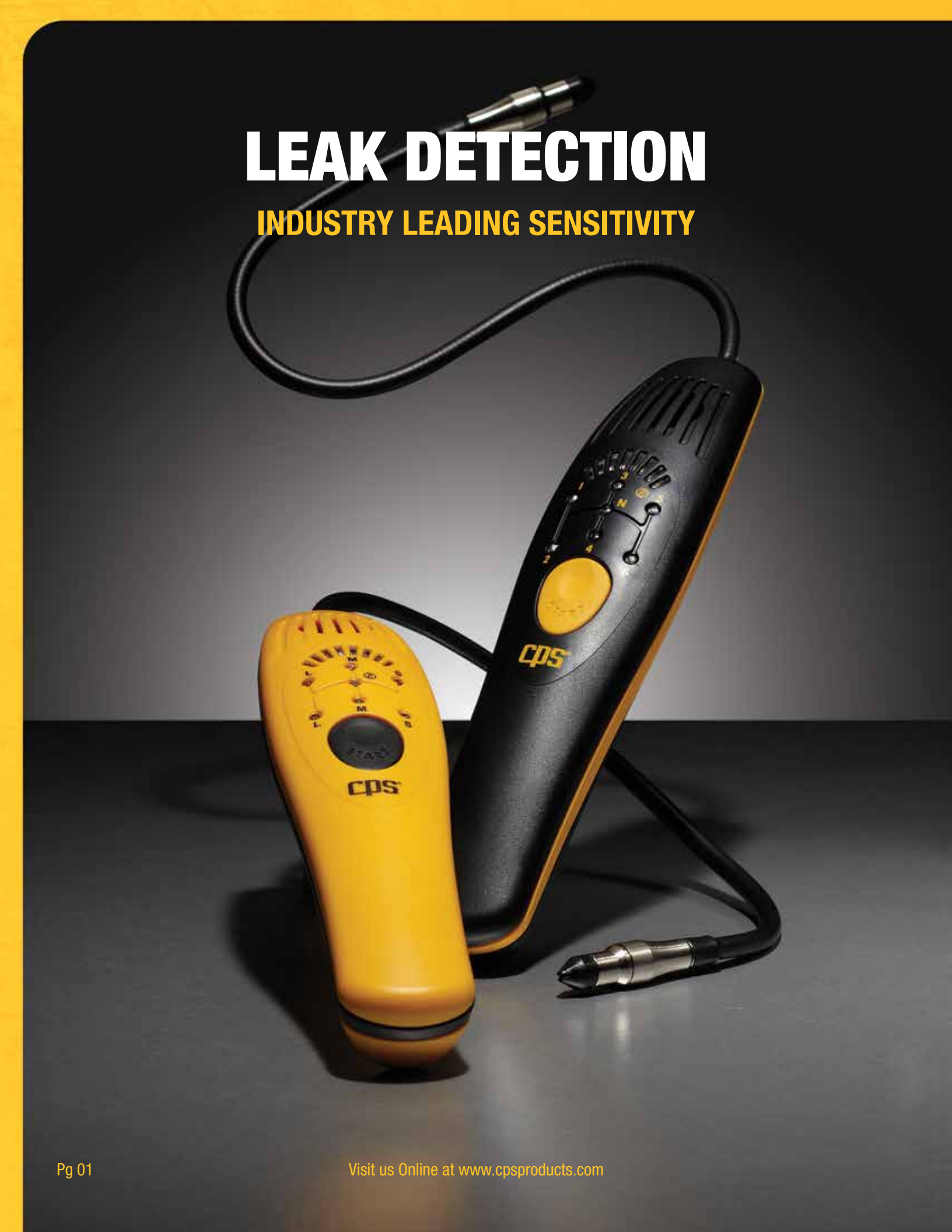
cps®

WHAT YOU NEED NEXT...

Call and Speak to a Sales Rep: 305-687-4121 / 1-800-277-3808

LEAK DETECTION

INDUSTRY LEADING SENSITIVITY



LEAK-SEEKER®

Electronic Leak Detectors

LS2 (Featuring E_Mos Sensor Technology)

LS1 & LS2 are PATENTED CPS® PRODUCTS

8,555,701

KEY FEATURES:

- Microprocessor controlled sensor electronics utilizing a multi channel signal detection method, improves sensitivity while reducing false alarms.
- Patented E_MOS detection technology incorporates a proprietary pulse modulation design to increase both battery and sensor life.
- Software managed sensor rejuvenation mode, automatically initiated at each start up ensures the highest level of sensitivity every use, for up to 500 hours of detecting leaks of less than .1 oz per year.
- The LS2 is the world's only leak detector with fully automatic sensitivity selection and control.
- Meets or exceeds all US and International standards for both automotive and commercial use
- Superior sensitivity to R410A and new HFO refrigerants
- Sensitivity to 35 parts per million (less than .1 oz per year)
- Detects 5% Hydrogen Trace Gas Mixture.
- 50 hour battery life (3 C batteries)
- 500 hours sensor life

LS1 & LS2 SPECIFICATIONS

Specifications	LS1	LS2
Detector Type	Patented E_MOS Detection Technology	Patented E_MOS Detection Technology
Sensitivity	Better than a 0.1 oz / year (3g / year)	Better than a 0.1 oz / year (3g / year)
Operation Selection	Manaul Operation	Fully Automatic
Visual Display	Visual Tachometer-like bar graph display w/ Eight High Intensity LEDs	Visual Tachometer-like bar graph display w/ Eight High Intensity LEDs
Flex Probe	15.5" flexible probe for hard to reach areas	15.5" flexible probe for hard to reach areas
Operating Temp	-18 to 60˚C (0 to 140˚F)	-18 to 60˚C (0 to 140˚F)
Power	50 hour battery life (3 C batteries)	50 hour battery life (3 C batteries)
Weight	1 lb 2 oz (500 g)	1 lb 2 oz (500 g)
Warranty	1 years	2 years

MADE IN U.S.A. | UL | CE | N11445 | F-Gas Compliant (ENG 14624:2005)

Spare Parts for E_Mos™ Sensors	
Item	**Description**
EMOS2	Replacement Sensor for LS1 & LS2
LS2XF	Replacement Sensor Filters for LS1 & LS2 (10-Pk)
LS2XVF	Replacement Vapor Filter Sensing Tip for LS1 & LS2

LS2XVF

EMOS2

CPS® ELECTRONIC LEAK-SEEKER® LS1 & LS2

CPS Products has raised the bar for leak detectors. The revolutionary new E_MOS technology developed by CPS is more sensitive, stable and accurate than any other detection method on the market, including heated diode, corona, ultrasonic and halide torches. Introducing the Leak Seeker II, simply turn it on and pinpoint the leak.

LS1 (Featuring E_Mos Sensor Technology)

LEAK DETECTION

CPS® ELECTRONIC LEAK-SEEKER® LS790B

Combines the most advanced microcomputer circuitry with field proven Ion-pump sensor technology creating a highly sensitive, accurate electronic refrigerant leak detector. Over 100 computer generated tones and a high intensity bar graph display quickly alerts the user to varying halogen concentrations. Patented automatic calibration design eliminates the need for manual balance or tick rate adjustments while the user selectable 10 sensitivity ranges enables the LS790B to detect leaks of all refrigerants.

LS790B

Visual Alarm Indicators

Patented Ion-Pump® Sensor

LSXS3

LSXBMK

LSXS

MADE IN U.S.A. | UL | CE | N11445 | F-Gas Compliant (ENG 14624:2005)

LS790B SPECIFICATIONS

Specifications	LS790B
Detector Type	Patented Ion-Pump sensor with built-in selective filter housing
Sensitivity	Better than 0.25oz/yr (7g/yr) leak rate of HFC
Audible Alarms	128 computer generated tones to precisely guide the user to the source of the leak.
Operation Selection	6 button keypad
Visual Display	High Intensity Bar Graph Display
Flex Probe	18" / 45.7cm long metal flex probe
Operating Temp	-18 to 60C (0 to 140˚F)
Power	40 hours batter life using 4 "AA" alkaline batteries.
Weight	1lb 2oz / 500g
Warranty	2 years

Spare Parts for LEAK-SEEKERS®

1= LS780A 2 = LS780B 3=LS790A 4=LS790B 5 = LS1&LS2

Item	Product	Description
LSXB	1,2,3,4	Battery compartment cover
LSXBMK	2,4	Maintenance Kit: (1)LSXS + (1)LSXSF
LSXC	1,2,3,4	Leather carrying case
LSXC3	5	Storage case LS1 & LS2
LSXE	1,2,3,4	Earphone
LSXMK	1,3	Maintenance kit 2 pcs/St. LSXS + 2 pcs/St. LSXVF
LSXS3	5	Sensor for LS1 & LS2
LSXS	1,2,3,4	Ion-pump sensor
LSXSF	2,4	Selective filter/housing
LSXSH	1,3	Aluminum Sensor housing
LSXVF	1,3	Water vapor filter

RM

Item No.	Refrigerant Type	Replacement Sensor
RM12	R-12	RMX12
RM134	R-134	RMX12
RMX11	R-22	RMX12
RM404	R-404A	RMX12
RM407	R-407	RMX12
RM410	R-410A	RMX12
RM502	R-502	RMX12
RM507	R-507	RMX12

Item No.	Refrigerant Type	Replacement Sensor
RMX11	R-12	RMX12
RMX12	R-134	RMX12

RM SPECIFICATIONS

SENSITIVITY	100 to 1,000 ppm
ACCURACY	± 3% of the setting or ± 25 ppm
VISUAL ALARMS	High intensity LED display
AUDIBLE ALARM	85 db at 1 foot
OPERATING TEMPERATURE	-20 to 150 F /-28 to 65 C
SENSOR MODULE	Relative Humidity 10 to 95% non-condensing
CONTROL MODULE	32 to 150 F / 0 to 65 C
POWER	AC or DC control voltages.
SENSOR FAILURE INDICATOR	LED constantly illuminates
WEIGHT	1lb 2oz / 500g
WARRANTY	1 year

Refrigerant Monitors

Compact, highly reliable, yet economical refrigerant leak monitoring systems. Designed to monitor a single refrigerant in a single zone providing early warning of costly and environmentally damaging refrigerant leakage. Adjustable sensitivity settings between 100 to 1000PPM with an auxiliary 1⁄2 HP N.O. and N.C dry contact control function for operating an additional alarm or other safety device. Replacement sensors are interchangeable enabling the replacement of a failed sensor directly in the field without recalibration, minimizing “downtime.”

GAS-SEEKER® GS40 - Portable Combustible Gas Detector

The GS40 is a low maintenance, easy-to-use portable combustible gas leak detector engineered to pinpoint leaks in residential, commercial and industrial appliances. Advanced semiconductor sensor and electronic control package enables detection of gases commonly found in service applications including; Carbon Monoxide, Natural Gas, Propane, Ammonia, Methane, Acetone, Hydrogen and Iso-Butane, with a virtually instantaneous alarm response period. Applications include the inspection of furnaces, valves, regulators, pipelines, meters and other devices associated with combustible gases.

GS40

Detecting Range	0 - 100% LEL referenced to Methane.
Alarm Indication	Both visual and audible (>40db) alarm indicators
Low Level Alarm	Preset at 10% LEL
High Level Alarm	Preset at 30% LEL
Operating Conditions	0°F to 104°F / -20°C to +40°C at less than 98% RH (non-condensing)
Power	Working voltage is 3VDC using two 1.5V AA batteries.
Battery Life/Indicator	5 hrs continuous use. Orange LED constantly illuminates when battery is low
Sampling	Natural diffusion
Dimensions	7.2 x 0.71in / 183 x 18mm
Weight	5.3oz / 150g (including battery)

UV LEAK DETECTION

VISUAL LEAK INSPECTION

UVPRO

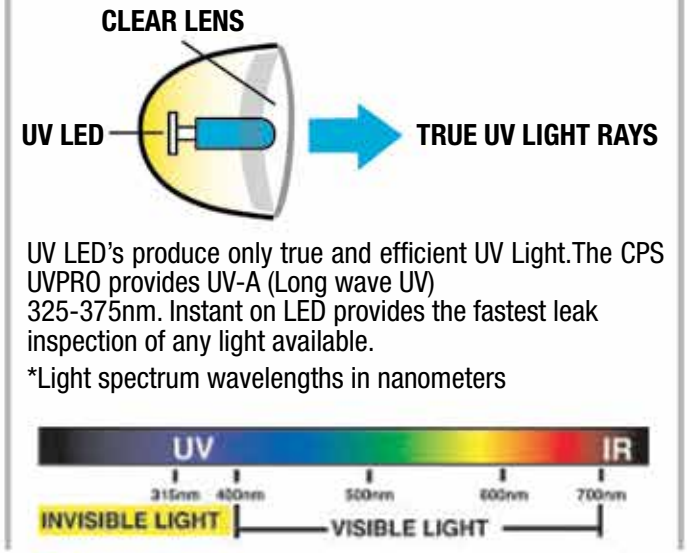
UVPRO UV Flashlight & Enhancing Glasses

The new and improved UVPRO light is the most compact and efficient UV light we have ever designed. The nine high intensity true UV LED's are specifically engineered to maximize the fluorescing capabilities of today's most commonly used dyes while greatly reducing the amount of "nuisance" background blue light emitted. Its rugged anodized aluminum body and o-ring sealed battery compartment allows it to handle harsh field conditions while small enough to conveniently fit in your pocket.

- 9 True UV emitting LED technology
- Rugged anodized aluminum body
- Works with all common dye additives
- Ultra Compact and lightweight
- Instant "ON" with no heat produced
- Operates on (3) AAA batteries (included)

Why BLUE is NOT Necessarily Cool?

A correctly tuned Ultra Violet (UV) lamp should predominantly emit invisible UV light waves with only a trace of visible "purple" or "blue" light. The small amount of visible light is required to direct the user's eyes to the leak search area, while the invisible UV light rays actually illuminate the leaking dye. Lamps that emit large amounts of visible blue light have been marketed heavily as being more powerful and more effective at fluorescing leaks, backed by the obvious high output of visible light. Knowing that UV dye additives requires invisible true UV light rays to effectively fluoresce dispels this claim altogether. In fact, special "blue blocking" glasses are required for use with these high output blue lamps in order to remove the nuisance blue light from the vision of the user during the leak search process. Otherwise, the high output of light will mask the actual leak or illuminating dye additive.



UV LED's produce only true and efficient UV Light.The CPS UVPRO provides UV-A (Long wave UV) 325-375nm. Instant on LED provides the fastest leak inspection of any light available.

*Light spectrum wavelengths in nanometers

UV LED TECHNOLOGY

UV55

UV55 LED Refrigerant Leak Detection Kit

- UVPRO True UV emitting LED light technology
- Compact & Rugged anodized aluminum body
- Mess-free and easy to use Squeeze Gun™ injector
- 1 UVS2 universal OEM approved dye cartridge
- Includes 90° low side snap coupler
- Operates 8 continuous hours on (3) AAA batteries (included)

UV55 Includes: UVPRO LED flashlight, squeeze gun injector w/ hose, R-134a 90° low coupler, safety glasses, UVS2 dye cartridge and carrying case.

COMPUTE-A-CHARGE® CHARGING SCALES

WORTH THEIR WEIGHT IN COLD

CHARGING SCALES

CC240RF

Born in the USA:

CPS designs and manufactures its own products in the United States, resulting in engineering excellence, as well as consistent, industry leading quality and reliability.

KEY FEATURES:

- Operates in the international ISM band for worldwide use.
- Advanced communication software ensures uninterrupted connectivity between hand-held display unit and scale platform.
- Calibrated to strict NIST Standards at our manufacturing facility in Hialeah, Fl.
- Accuracy specification exceeds all OEM requirements for charging accuracy and is twice as good as any competitive unit on the market.
- Temperature compensated over the entire operating temperature range to maintain charging accuracy under all ambient conditions.
- Selectable measurements in Imperial or Metric units.
- Designed to withstand overloads of 150%.
- High contrast wide angle LCD Display for ease of viewing.
- Designed and manufactured in the USA

CC240RF & CC840RF SPECIFICATIONS

Specifications	CC240RF	CC840RF
Working load capacity	240 lbs (110kg)	240 lbs (110kg)
Operating Temperature	14°F to +122°F / -10°C to +50°C	14°F to +122°F / -10°C to +50°C
Accuracy	0.05% of reading or ± 0.25oz / (± 10g) whichever is greater	0.05% of reading or +/- 0.25oz / (+/-10g) whichever is greater
Resolution	±0.25oz / ±10 grams	±0.25oz / ±10 grams
Overload Protection	Electronic and mechanical	Electronic and mechanical
Platform Dimensions	10.0" x 10.0" / 25.4cm x 25.4cm	10.0" x 10.0" / 25.4cm x 25.4cm
Weight	8 lbs 15 oz. (4.00 kg) with batteries	9.8lb / 4.5kg
Power	One 9V alkaline (ANSI 1604AC-IEC 6LR61) (display unit)Four AA alkaline (ANSI 15A-IEC LR6) (scale platform)	One 9V alkaline (ANSI 1604AC-IEC 6LR61) (display unit)Four AA alkaline (ANSI 15A-IEC LR6) (scale platform)
Battery Life	32 hours of continuous use	32 hours of continuous use
Battery Indicator	Battery symbol with 3 segment display	Battery symbol with 3 segment display
RF frequency range	2.4 GHz, ISM band, can be used worldwide	2.4 GHz, ISM band, can be used worldwide
RF Transmission range	30ft / 9m	30ft / 9m
Readout	Imperial / Metric	Imperial / Metric
Warranty	1 year	1 year
Made in the USA	Yes	Yes
Progamable	No	Yes

CPS® PROGRAMMABLE WIRELESS REFRIGERANT CHARGING SCALES :

CPS Products proudly introduces its new line of cordless RF charging scales including the world's first fully automatic programmable RF controlled unit featuring set it and forget it software. For over 27 years Compute-A-Charge has been the brand you can trust for performance accuracy and reliability.

CC840RF

CHARGING SCALES

CPS® REFRIGERANT CHARGING SCALES :

With specifications exceeding all OEM requirements for charging accuracy, Compute-A-Charge Scales are twice as good as any competitive unit on the market. The Standard Series of Compute-A-Charge scales are performance leaders in accuracy, reliability and the Standard by which all others are measured. The competition simply doesn't measure up!

HIGH CAPACITY CHARGING SCALES :

High capacity 220lb/100kg Compute-A-Charge refrigerant charging/recovery scale, calibrated to strict NIST standards. Fully enclosed and removable metal scale platform enables use of product in or out of the protective case. Large, highly visible 1 1⁄2" x 2"/37mm x 48mm high resolution LCD readout displays either Imperial or Metric measurements in .25oz / 10g increments. The ergonomic hand held remote incorporates 6ft coil cord, a hanging hook and is backed with a magnet for attaching to metal surfaces. Full mechanical and visual overload protection. Operates 60 continuous hours on two 9V alkaline batteries. Includes automatic off feature.

CC220

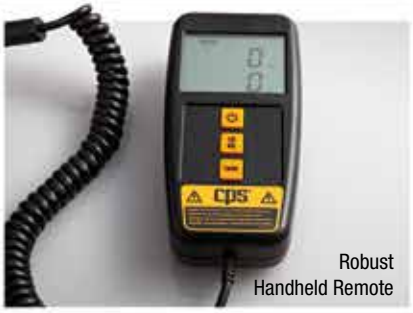
MADE IN U.S.A.

CE N11445

CC220 & CC110 SPECIFICATIONS

Specifications	CC220	CC800A
Working load capacity	220 lbs (100kg)	220LB /100Kg
Operating Temp	14°F to +122°F / -10°C to +50°C	14ºF - 122ºF / -10ºC to 50ºC
Accuracy	0.05% of reading or +/- 0.25oz / (+/- 10g)whichever is greater	0.05% of reading or +/- 0.25oz / (+/- 10g) whichever is greater
Resolution	±0.25oz / ±10 grams	±0.25oz / ±10 grams
Overload Protection	Electronic and mechanical	Electronic and mechanical
Platform Dimensions	8 ¾" x 8 ¾" / 22.23cm x 22.23cm	8 3/4" x 8 3/4" 223 x 223mm
Weight	5.6lb / 2.55kg	8.5 lb/3.9 kg
Power	Two 9V batteries, included	Two 9V batteries, included
Battery Life	60 hours of continuous use	30 hours of continuous. Solenoid valve lasts for 10,000 actuations.
Battery Indicator	Battery symbol with 3 segment display	Battery symbol with 3 segment display
Readout	Imperial / Metric	Imperial / Metric
Warranty	1 year	1 year
Made in the USA	Yes	Yes

Removable Platform



Robust Handheld Remote

Rugged Carrying Case

Visit us Online at www.cpsproducts.com

CC50

CPS® REFRIGERANT CHARGING SCALES :

With accuracy specifications exceeding all OEM requirements for charging accuracy, that is twice as good as any competitive unit on the market, the Standard Series of Compute-A-Charge scales are Performance Leaders in accuracy and reliability and the Standard by which all others are measured. The competition simply doesn't measure up!

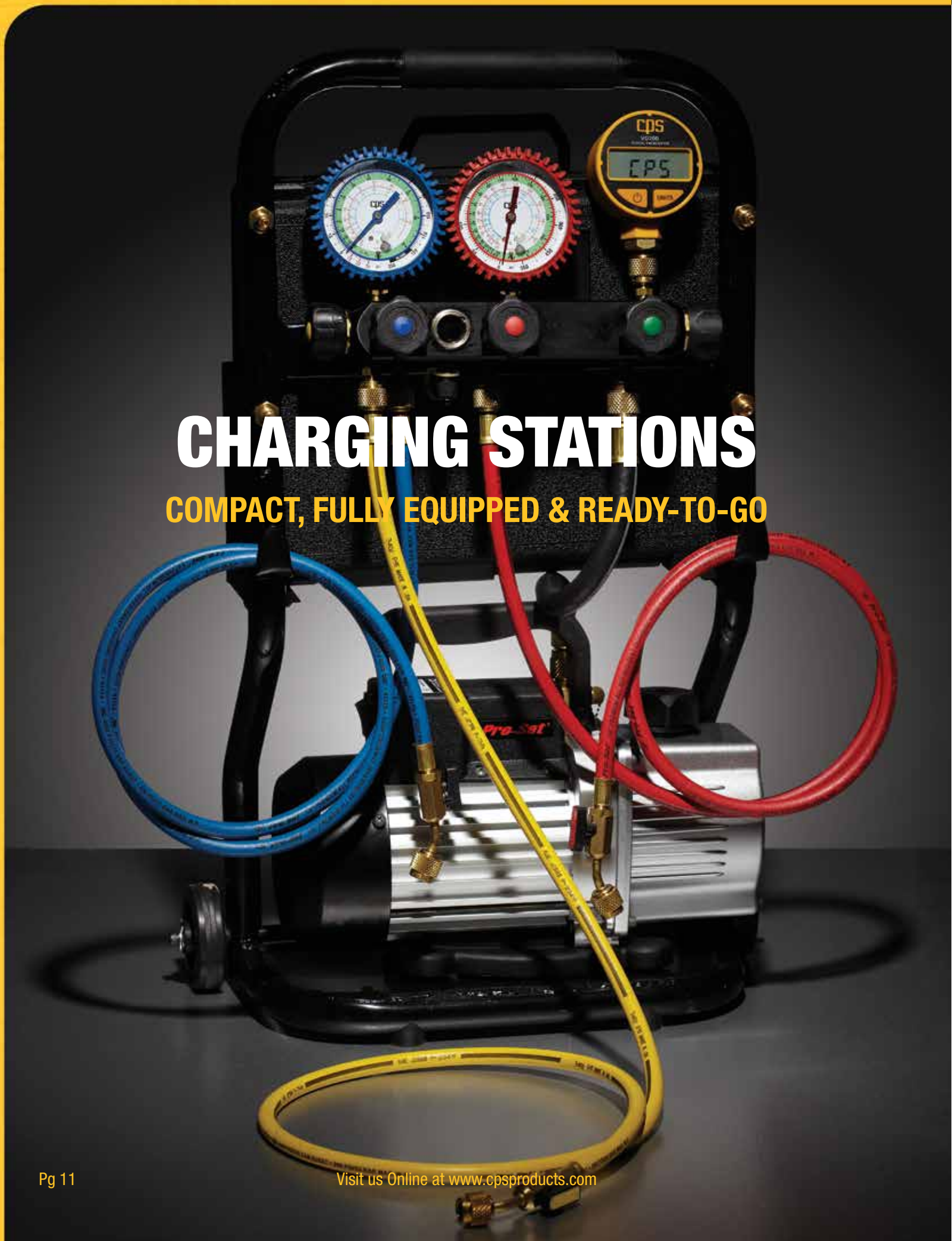
THE ONLY CHARGING SCALE WITH 1G RESOLUTION

KEY FEATURES:

- Accuracy specification exceeds all OEM requirements for charging accuracy and is twice as good as any competitive unit on the market.
- Temperature compensated over the entire operating temperature range to maintain charging accuracy under all ambient conditions.
- Environmentally sealed strain gage beam load cell technology first introduced by CPS in 1985.
- Designed to withstand overloads of 150%.
- High contrast wide angle LCD Display for ease of viewing.
- Platform can be removed from carrying case.
- Magnetic back on handheld unit.
- Hanging hook.
- User selectable automatic power off to conserve batteries.
- Designed and manufactured in the USA

CC110 & CC50 SPECIFICATIONS

Specifications	CC50
Working load capacity	55 lbs (25kg)
Operating Temp	14°F to +122°F / -10°C to +50°C
Accuracy	0.05% of reading or ± 0.05oz / (± 1g) whichever is greater
Resolution	±0.05oz / ±1 gram
Overload Protection	Electronic and mechanical
Platform Dimensions	8 ¾" x 8 ¾" / 22.23cm x 22.23cm
Weight	5.6lb / 2.55kg
Power	Two 9V batteries, included
Battery Life	60 hours of continuous use
Battery Indicator	Battery symbol with 3 segment display
Readout	Imperial / Metric
Warranty	1 year
Made in the USA	Yes



CHARGING STATIONS

COMPACT, FULLY EQUIPPED & READY-TO-GO

CHARGING STATIONS

CS16DMV5D2P5E

PRO-SET® PORTABLE VACUUM / CHARGING STATIONS

PRO-SET charging stations combine all the necessary tools required to perform a full system evacuation and subsequent charging in a single, compact, mobile unit. Each station includes a Vortech or BlackMax service manifold, a PRO-SET vacuum pump, a Compute-A-Charge refrigerant scale and premium charging hoses. The lightweight tubular steel frame incorporates rear wheels for easy transport to and from the job site with integrated storage areas for all components.

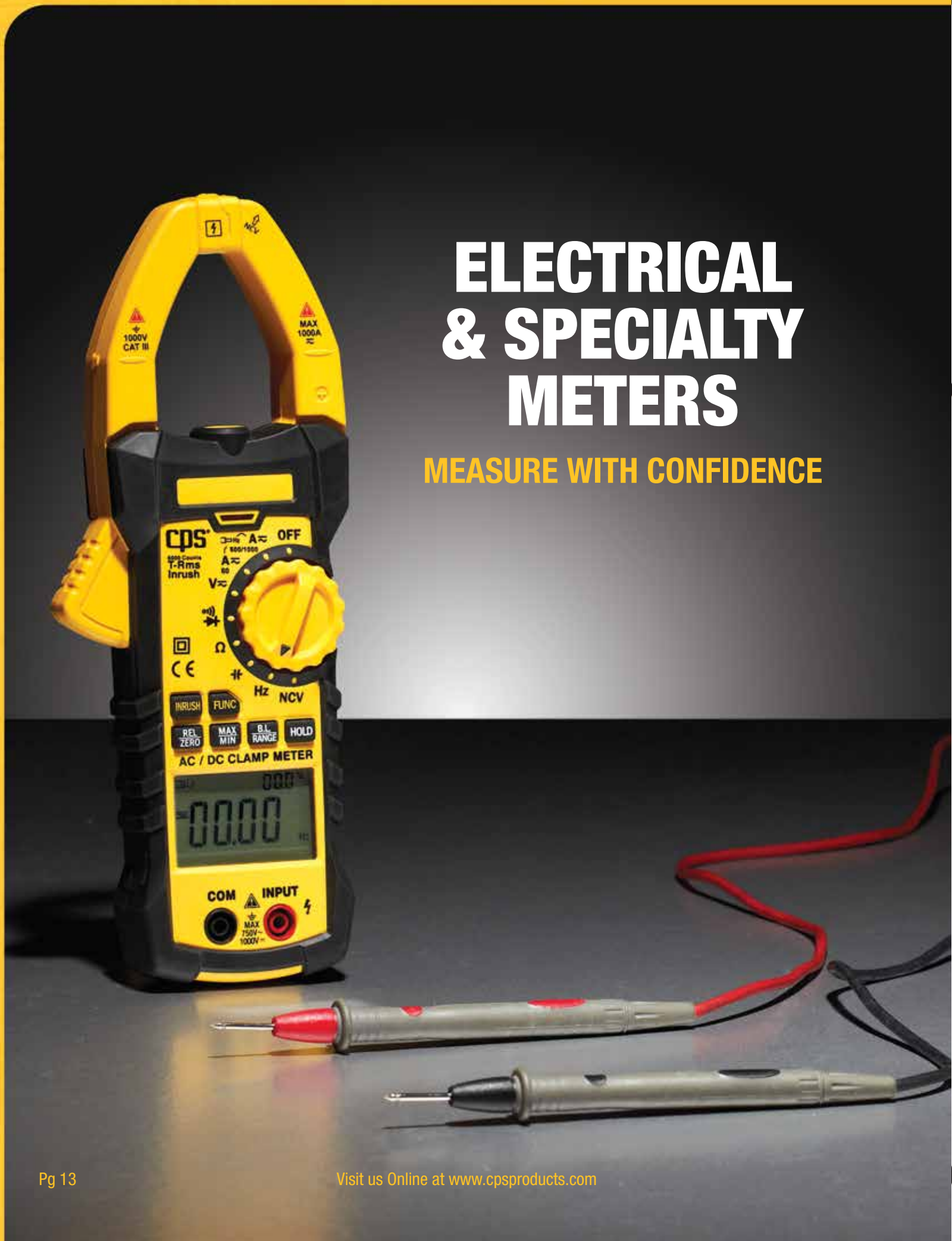
- Unsurpassed Charging Accuracy of ± 0.05% of reading
- Hanging ports and hooks for hose storage
- Rear wheels on Frame for Ease of Mobility
- Contains all Tools Needed for Charging / Evacuation
- All Components Store Easily on Cart

Hard Mounted Manifolds

Rear wheels on Frame for Ease of Mobility

All Components Store Easily on Cart

Item	Application	Manifold Type	Refrig. Scales	Press./ Temp. Scales	Hoses	Vacuum Pump	Scale
CS12SMBDS5E	Appliance / Light Refrigeration	BlackMax 2 valve Manifold (MBD)	R22, R134a, R404A (2.5" / 68mm)	PSI / °F	3-pk of 5ft / 150cm Std. BV Hoses	Single Stage 2 CFM Pump (50 microns)	220lb Compute-A-Charge Scale
CS12SMBHP5E	Air Conditioning	BlackMax 2 valve Manifold (MBH)	R410A, R22, R404A (2.5" / 68mm)	PSI / °F	3-pk of 5ft / 150cm Prem. BV Hoses	Single Stage 2 CFM Pump (50 microns)	220lb Compute-A-Charge Scale
CS12DMV4H2P5E	Air Conditioning / Refrigeration	Vortech 4 valve Manifold (MV4H2)	R22, R410A, R404A, R134a (3.5" / 80mm)	PSI / °F	3-pk of 5ft / 150cm Prem. BV Hoses	Two Stage 2 CFM Pump (10 microns)	220lb Compute-A-Charge Scale
CS16DMV4H2P5E	Air Conditioning / Refrigeration	Vortech 4 valve Manifold (MV4H2)	R22, R410A, R404A, R134a (3.5" / 80mm)	PSI / °F	3-pk of 5ft / 150cm Prem. BV Hoses	Two Stage 6 CFM Pump (10 microns)	220lb Compute-A-Charge Scale
CS16DMV5D2P5E	Refrigeration	Vortech 5 valve Manifold (MV5D2)	R22, R134a, R404A (3.5" / 80mm)	PSI / °F	3-pk of 5ft / 150cm Prem. BV Hoses	Two Stage 6 CFM Pump (10 microns)	220lb Compute-A-Charge Scale
CS12DMV4TP6Q	Air Conditioning / Refrigeration	Vortech 4 valve Manifold (MV4T)	R22, R134a, R404A (2.5" / 68mm)	kPa / PSI / °C	3-pk of 6ft / 180cm Prem. Hoses & Cplrs.	Two Stage 2 CFM Pump (10 microns)	100kg Compute-A-Charge Scale



ELECTRICAL & SPECIALTY METERS

MEASURE WITH CONFIDENCE

ELECTRICAL & SPECIALTY METERS

Captures the True Motor InRush Current

Includes Built in Data Logging w/ Software

AC750 Probes

AC750 Front

AC750 Back

AC750 DIGITAL CLAMP METER

The AC750 is a Multi-Functional AC/DC Clamp Meter. The AC750 hosts an array of enhanced features such as the ability to capture True Inrush measurements, Non-Contact Voltage Detection and Data Logging your output readings to a PC (USB Connection cable included).

SPECIFICATIONS

Specifications	Description
Display	6000 count dual display
Range Control	Auto range mode
Battery	9V battery one piece
Dimensions	225(W) x 86(H) x 33(D) mm
Weight	Approx. 320g

AC750 KEY FEATURES:

- Versatile for testing AC/DC voltage, AC/DC current, resistance and frequency
- True RMS AC measurement
- Max./Min. value measurement
- Audible continuity and diode test
- Non contact voltage detection
- Integrated clamp light and LCD backlight
- Auto zero key for DCA measurement
- Auto/Manual range, auto power off
- Secondary injection molded case, safety as per IEC1010 1000V CAT III

USB Data Connection

Built in Flashlight

Extra Strength Grip Clamp

ELECTRICAL & SPECIALTY METERS

AM50 AIR VELOCITY METER

Precision vane type anemometer provides fast, accurate air velocity measurements for use in balancing HVAC systems or determining CFM calculations. A convenient TYPE K thermocouple is built-in to the remote vane providing quick measurement of grille/duct outflow temperatures from 32 to 122 F / 0 to 50 C. Included, is an easy-to-read laminated conversion chart that allows the user to quickly convert air velocity measurements into CFM calculations at a glance. Shipped with a rugged carrying case and is CE approved.

SPECIFICATIONS

UNITS	RANGE	ACCURACY
Ft/Min	0-8800	±3% or 0.1
M/S	0-45	±3% or 0.1
km/Hr	0-140	±3% or 0.1
knots	0-88	±3% or 0.1

CE N11445

AM50

SM150

SM150 SOUND LEVEL METER

Professional grade sound level indicator designed to measure noise levels from 35 to 130dB. The unit incorporates a large LCD, maximum hold function, Over and Under range indicator, peak and average response settings and A-C weighing for checking compliance with standard safety regulations. Applications include the monitoring of HVAC/R compressors, blowers, health and safety requirements, environmental quality issues, offices, factory machinery, airports, auditoriums and studio acoustics. Unit is CE approved and includes carrying case.

EXAMPLES	SOUND PRESSURE LEVEL dBSPL	SOUND PRESSURE N/m2 = Pa	SOUND INTENSITY watts/m2
Jet aircraft, 50 m away	140	200	100
Threshold of pain	130	63.2	10
Threshold of discomfort	120	20	1
Chainsaw, 1m distance	110	6.3	0.1
Disco, 1 m from speaker	100	2	0.01
Diesel truck, 10m away	90	0.63	0.001
Curbside of busy road, 5m	80	0.2	0.0001
Vacuum cleaner, distance 1m	70	0.063	0.00001
Conversational speech, 1m	60	0.02	0.000001
Average home	50	0.0063	0.0000001
Quiet library	40	0.002	0.00000001
Quiet bedroom at night	30	0.00063	0.000000001
Background in TV studio	20	0.0002	0.0000000001
Rustling leaf	10	0.000063	0.00000000001
Threshold of hearing	0	0.00002	0.000000000001

TEMPERATURE & SYSTEM MEASUREMENT

TOOLS THAT MEASURE UP

TEMPERATURE & SYSTEM MEASUREMENT

SH450 THERMOMETER / ANALYZER

The SH450 Total Systems Analyzer is quite possibly the most versatile tool you will ever own. Measure pressure from -14.7 to 725 PSI, automatically calculate and display superheat, sub cooling, relative humidity, wet bulb, dry bulb and dew point readings in seconds. Display temperature differential between any 2 of 4 independent temperature channels. Record and display min/max readings for any channel at the touch of a button. Scan all 4 temperature channels simultaneously. The SH450 is self contained in a rugged polyethylene case with plenty of room to fit all your accessory probes.

SH450

SH450 SPECIFICATIONS

SH450 Superheat / Subcool Specifications	
Pressure Range	-14.7 PSIG to 725.0 PSIG (-100 kPa to 5000 kPa)
Pressure Accuracy	±1% of reading or ± 0.5 PSIG (± 3.5 kPa), whichever is greater
Pressure Units	PSIG, kPa, BAR, Hg, kg/cm2
Proof Pressure	1000 PSI (7000 KPa)
Temperature Accuracy	±0.4˚F / ±0.2˚C from 14.0˚F to 158˚F / -10.0˚C to 70˚C; 0.6˚F / 0.3˚C elsewhere in the range
Dew or Bubble Saturation Temperature	±1.8˚F (±1.0˚C)
SH450 Thermo-Psychrometer Specifications	
Measurement Temperature Range	-40˚F to +300˚F (-40˚C to +150˚C). Actual temp range depends on the probe being used.
Temperature Resolution	±0.1˚F or ˚C
Temperature Accuracy	±0.4˚F / ±0.2˚C from 14.0˚F to 158˚F / -10.0˚F to 70˚C; 0.6˚F / 0.3˚C elsewhere in the range
RH Range	0 to 100%RH
RH Accuracy (TMX3RH)	±1.8%RH from 10 to 90%RH; ± 3% elsewhere in the range
DB Accuracy (TMX3RH)	±1.2% of reading ± 1.0˚F from -40˚F to 200˚F (± 1.2% of reading ± 0.5˚C from -40˚C to 90˚C)
SH450 General Specifications	
Power Source	9V alkaline battery or optional TMX3PS AC adapter for 100 to 240VAC (40 to 60 Hz) - USA Plug
Battery Life	30hrs. continuous use
Automatic Power Off	After 10 minutes of inactivity (no key press)
Dimensions	12” x 10” x 3” (30.5cm x 25.4cm x 7.6cm)
Weight	3lb (1.4 kg) with probes
Warranty	1 year

SH450 KEY FEATURES:

- 90+ refrigerant PT table built-in
- Four discrete temperature channels
- Superheat and subcool measuring functions
- Direct relative humidity and wet bulb measurements
- Temperature differential with min/max memory
- Stainless steel pressure-vacuum sensor with a range of -14.7 PSI to 725 PSI
- Reads in PSIG, KPa, BAR, Hg, kg/cm2
- High accuracy silicon humidity transducer probe port
- Operates on 9V battery or optional wall transformer
- Auto-off or continuous on mode
- Large, 4-digit backlit display
- Calibrated to NIST traceable standards
- Displays bubble and vapor saturation temperatures

Rugged Clamp-On Probe

Premium Build Pressure Port

TM360

TM360 KEY FEATURES:

- Four discrete temperature channels
- High accuracy silicon humidity transducer probe port
- Large, 4-digit, easy-to-read, backlit display
- Min / Max and memory functions
- Temperature differential between any 2 of the 4 temperature ports
- Direct relative humidity and wet bulb measurements
- Calibrated to NIST traceable standards
- Auto-off after 10 minutes of non-use or continuous ON mode
- Operates 30 continuous hours on 1 9V alkaline battery
- Integrated battery eliminator jack
- Rugged polyethylene carrying case
- Large probe storage area
- Switchable ˚C / ˚F

TM360 Accessory Probe (Included)

TM360

Available with the following accessory probes: 1-TMX2A, 1-TMX2S, 1-TMX2G

TM360C

Available with the following accessory probes: 1-TMX3C, 1-TMX2S, 1-TMX2A

TM360 THERMOMETER / ANALYZER

The TM360 is a professional grade thermo-psychrometer adaptable to accommodate all your temperature, humidity, dry/wet bulb and dew point measurements.The unit incorporates 4 discrete temperature ports all capable of min/max and memory functions including temperature differential between any 2 of the 4 available ports. Press the SCAN key and the display will alternate between all 4 ports in three second intervals providing continuous monitoring of multiple probe points during critical system diagnosis. A dedicated special purpose port accommodates an optional state of the art silicon humidity transducer probe for fast and accurate measurements during superheat calculations. Designed in a rugged polyethylene case the TM360 is engineered to provide laboratory accuracy in rough field conditions. A generous probe storage area is provided for housing all your job specific probes directly in the unit itself.

TM360 Thermo-Psychrometer Specifications	
Temperature Resolution	±0.1˚F or ˚C
Temperature Accuracy	±0.4˚F / ±0.2˚C from 14.0 to 158˚F / -10.0 to 70˚C; 0.6˚F / 0.3˚C elsewhere in the range
RH Range	0 to 100%RH
RH Accuracy (TMX3RH)	±1.8%RH from 10 to 90%RH; ± 3% elsewhere in the range
DB Accuracy (TMX3RH)	±1.2% of reading ± 1.0˚F from -40˚F to 200˚F (± 1.2% of reading ± 0.5˚C from -40˚C to 90˚C)

TM360 General Specifications	
Power Source	9V alkaline battery or optional TMX3PS AC adapter for 100 to 240VAC (40 to 60 Hz)
Battery Life	30hrs. continuous use
Automatic Power	Off After 10 minutes of non-use or user selectable continuous ON mode
Backlight	15 seconds
Dimensions	12” X 10” X 3” (30.5cm x 25.4cm x 7.6cm)
Weight	3lb (1.4 kg) with probes
Warranty	1 year

Accessory Probes		
TMX2A	Air Probe	-40 to 221° F / -40 to 105° C
TMX2C	Pipe Clamp-On Probe	-40 to 221° F / -40 to 105° C
TMX2G	General Purpose Probe	-40 to 257° F / -40 to 125° C
TMX2P	Puncture Probe	-40 to 257° F / -40 to 125° C
TMX2RH	RH / DP Probe	-40 to 194° F / -40 to 90° C
TMX3RH	RH / WB / DP Probe	-40 to 194° F / -40 to 90° C RH range: 0 to 100%
TMX2S	Velcro Strap Pipe Probe	-40 to 257° F / -40 to 125° C
TMX2FP	Flexible Touch Probe	-40 to 221° F / -40 to 105° C
TMX2GA	General Purpose Air Probe	-40 to 257° F / -40 to 125° C

TEMPERATURE & SYSTEM MEASUREMENT

Built in LED Light

K-Type Input

4 Digit Backlit LCD

TMINI12

TMINI12 NON-CONTACT THERMOMETER

The TMINI12 infrared thermometer provides instant temperature measurement over a wide range of applications. The unit offers simple one-handed operation, laser point sighting,a backlit display, °C/°F select ability and an automatic power off feature.Use the TMINI12 to quickly measure temperatures of registers, ductwork, furnaces,evaporators,condensers,compressors, relays, manifolds, radiators,exhaust systems, thermostats, bearings and more.Leather carrying case and 9V alkaline battery are included.

TM50 ANALOG POCKET THERMOMETER

A step above the standard pocket thermometer the TM50 is packed full of features, including a user selectable temperature alarm, a countdown timer, Min/Max, °F/°C selectable and memory functions. The unit incorporates a highly accurate stainless steel 96mm puncture probe with a 4ft/122cm cord. Temperature range is -58° to 500°F / -50° to 260°C. The TM50 operates on a single AAA alkaline battery with 25 hours of battery life and a low battery indicator.

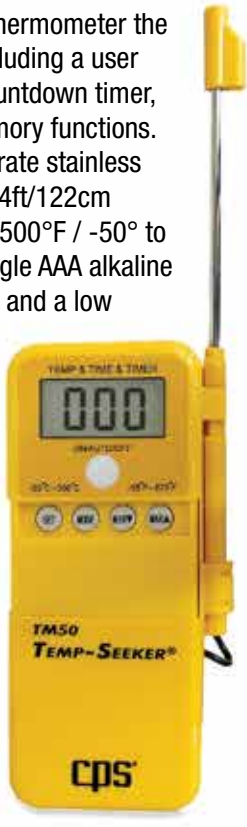
TMINI12 SPECIFICATIONS

TMINI12 THERMOMETER SPECIFICATIONS	
Temperature Range	-76°F to 932°F or -60°C to 500°C
D:S (Distance to Spot Size)	12:1
Emissivity	Emmisivity pre-set at 0.95 - adjustable
Accuracy	±2ºC (±4ºF) or ±2% of reading
Display	Digital Backlit LCD
Resolution	1ºC/Fº
Batteries / Life	(2) AAA batteries and auto power off

DIGITAL AND ANALOG POCKET THERMOMETERS	
Item No.	Description
TMDP	Digital pocket thermometer with stainless steel probe and pocket clip. Range: -58° to 302°F / -50° to 150°C
TMAP	Analog pocket thermometer with 1" dial and Stainless steel probe and pocket clip. Range: 0° to 220°F
TMAPC	Analog pocket thermometer with 1" dial and Stainless steel probe and pocket clip. Range: -40° to 80°C

TMAP

TMDP



TM50

TMXSK90

Ribbed Handle

TMXSK90 TEMPERATURE PROBE

The TMXSK90 is the fastest and most accurate handheld K-type surface probe providing accurate readings in less than 5 seconds. The sensor is made from flat-spring ribbons of thermocouple material for contact on uneven surfaces. An angled head for measuring hard to reach surfaces and a 3 foot coiled lead for durability and long reach. The exposed junction provides for fast response and is compatible with any other instrument with a K-Type input.

TMXSK TEMPERATURE PROBE

The TMXSK is the fastest and most accurate handheld K-type surface probe providing accurate readings in less than 5 seconds. The sensor is made from flat-spring ribbons of thermocouple material for contact on uneven surfaces. A ribbed handle for grip and a 3 foot coiled lead for durability and long reach. The exposed junction provides for fast response and is compatible with any other instrument with a K-Type input.

Coiled Lead

Flat-Spring Ribbons

K-Type Accessory Probe

TMXSK

TMXKBEAD TEMPERATURE PROBE

The TMXKBEAD is a standard K-type bead probe ideally suited for getting fast results when measuring temperature in a variety of media. This 36” long (1 meter) probe provides accurate readings in less than 5 seconds over the range of -58ºF to 400 ºF (-50 ºC to 204 ºC).

SPECIFICATIONS

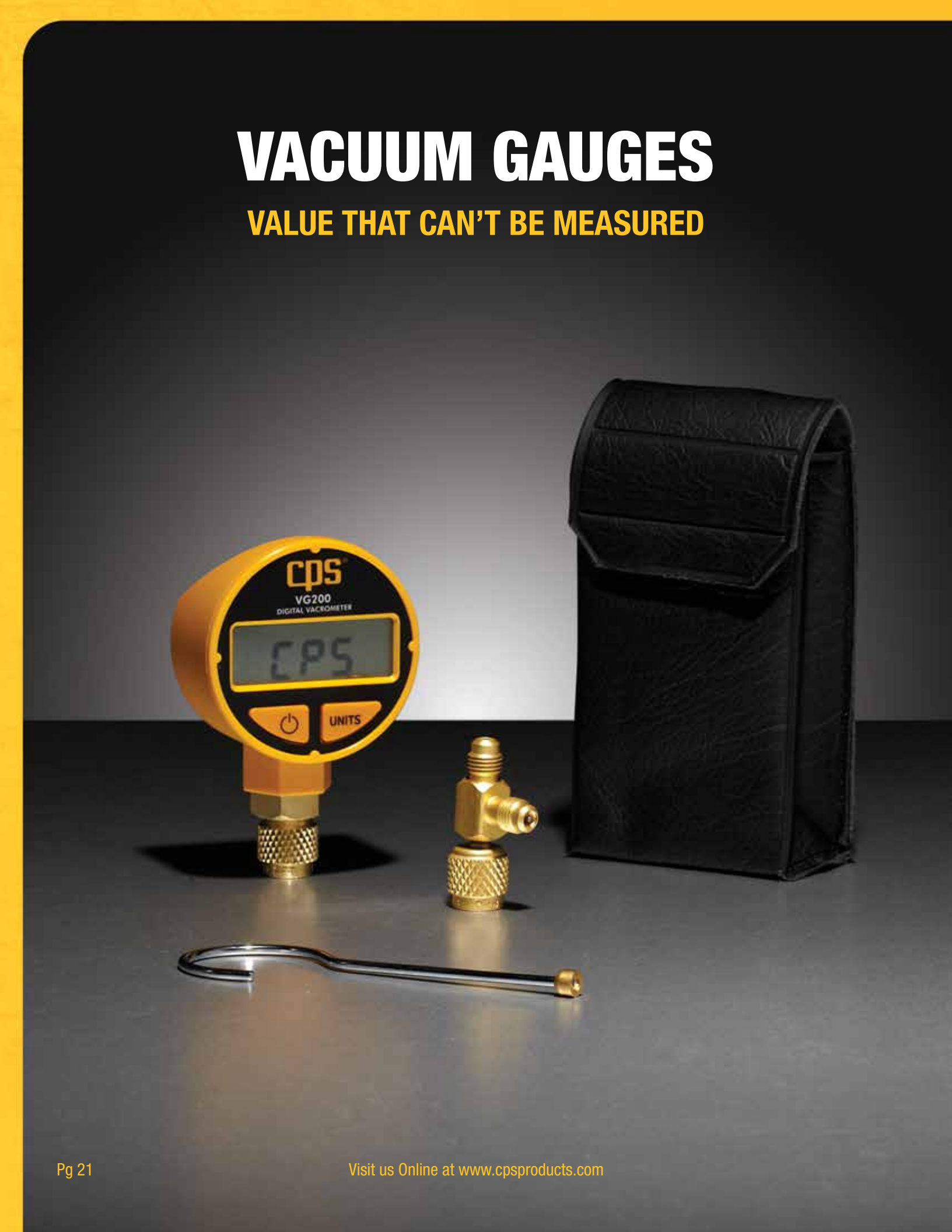
THERMOMETER SPECIFICATIONS	
TMXSK90	Max Temp: 752°F (400°C)
TMXSK	Max Temp: 752°F (400°C)
TMXKBEAD	Max Temp: 400°F (204°C) Min Temp: -58°F (-50°C)

Used as seen above on the CPS TMINI12 and is compatible with any other instrument with a K Type input.

TMXKBEAD

VACUUM GAUGES

VALUE THAT CAN'T BE MEASURED



VACROMETER™ DIGITAL VACUUM GAUGE

Advanced measurement instrument providing continual digital readout of evacuation process on large 5 digit LCD. Measurement units are user selectable to read in Microns,Torr, in/hg or mBar at the touch of a key.

Advanced surface mount technology automatically compensates for ambient changes in the environment ensuring accuracy and consistency in performance. Advanced field-cleanable sensor is able to withstand 400 PSI of positive pressure. Unit operates 30 hours on 9V alkaline battery with low battery indicator and auto off feature. Includes carrying case, hanging hook, AVT45, 9V battery and is CE approved.

VG200

AVT45

VG201

Add vacuum measurement to your manifold with a VG201A

VG200 VACROMETER DIGITAL VACUUM GAUGE SPECIFICATIONS

Type	Self - heated thermistor bridge with integral temperature compensation from 0 to 50 °C (32 to 122 °F).
Operating Pressure Range	Atmospheric pressure to 0 microns Maximum Working pressure: 400 PSIG
Burst Pressure	400 PSIG
Operating Range	VG200- Atmospheric to 0 microns / VG100A- Atomospheric to 25 Microns
Accuracy	+/- 10% of Reading.
Operating Temp Range	Compensated (accuracy as stated): 0°C TO 50°C (32°F TO 122°F) Non-compensated (add +/- 0.5% error for every °C outside compensated range): 0 to 50°C (-22 to 158°F)
Operating & Storage Humidity	0-95%, non-condensing.
Storage Temperature	- 40 to 185°F / - 40 to 85°C
Power Source	One 9 volt alkaline battery (ANSI 1604AC – IEC 6LR61)
Battery Life	20 hours of continuous use. Instrument shuts itself off after 5 minutes of operation.
Weight	5.5 oz. / 153 g. excluding the battery.
Dimensions	68 mm. diameter by 40 mm. deep by 124 mm. overall height (2.7" dia. by 1.6" deep by 5" overall height).
Mechanical Connection	Standard 1/4" female SAE refrigerant hose type with core depressor.
Battery Indicator	Battery symbol with 3 segment Power Level Bar Graph. (VG200). LED Low Battery Indicator (VG100)

VACUUM GAUGES

VACROMETER™ DIGITAL VACUUM GAUGE

Compact self-contained instrument designed to provide constant indication and monitoring of the evacuation process from start to finish. Nine discrete high intensity LED's are preset to illuminate upon achieving industry standards for proper system evacuations. Advanced surface mount technology automatically compensates for ambient changes in the environment ensuring accuracy and consistency in performance. Advanced field-cleanable sensor is able to withstand 400 PSI of positive pressure. Unit operates 25 hours on 9V alkaline battery with low battery indicator and auto-off feature.
Includes carrying case.

VG100A

MADE IN U.S.A.

CE N11445

GAUGE ACCESSORIES

VACUUM GAUGE SPARE PARTS & ACCESSORIES	
VGXC	Carrying case VG100A/ VG200
VGXH	Hanging Hook
AVT87	Adapter for VG100A/VG200. 1/4" SAE male to 1/2"-20 male to 1/2" -20 swivel female tee
AVT48	Adapter for VG100A/VG200. 1/4" SAE male to 1/2" ACME male to 1/4" SAE swivel female tee
AVT45	Adapter for VG100A/VG200. 1/4" SAE male to 1/4" SAE male to 1/4" SAE swivel female tee

VG201

Add vacuum measurement to your manifold with a VG101A

AVT45

AVT45 VACUUM GAUGE ADAPTER

The AVT45 is premium built brass adapter for the VG100A / VG200 and comes with a 1/4" SAE male to 1/4" SAE male to 1/4" SAE swivel female tee.

VACUUM PUMPS

LIGHT WEIGHT DESIGN
HEAVY WEIGHT PERFORMANCE

VACUUM PUMPS

Pro-Set® PREMIUM VACUUM PUMPS

Pro-Set Premium Series vacuum pumps are offered in single and dual stage units with versatile voltage and HP motor options. Pro-Set pumps boast the same high quality, high value features engineered into all of our Pro-Set products providing performance excellence and years of reliable service.

Universal IEC Socket
w/ Dual Voltage Selector Switch

VP12D

DUAL STAGE SPECIFICATIONS

Specifications	VP2D	VP4D	VP6D	VP8D	VP10D	VP12D
Motor Size (HP) RPM @ 50/60Hz	1/3 (HP) 1440/1720	1/2 (HP) 2880/3440	1 / 2 (HP) 2880 / 3440	2/3 (HP) 2880 / 3440	3/4 (HP) 2880 / 3440	1 (HP) 2880 / 3440
Dimensions (Inches)	12.2" x 5" x 9.6"	13.1" x 5.5" x 10"	13.1" x 5.5" x 10"	14.9" x 5.7" x 10.6"	14.9" x 5.7" x 10.6"	14.9" x 5.7" x 10.6"
Weight	17.7lb / 8.0kg	22.1 lb / 10.0 kg	22.5 lb / 10.2 kg	29.8 lb / 13.5 kg	30.3 lb / 13.7kg	30.9 lb / 14.0 kg
Operating Temperature Range	0°C (32°F) to 52°C (125°F)	0°C (32°F) to 52°C (125°F)	0°C (32°F) to 52°C (125°F)	0°C (32°F) to 52°C (125°F)	0°C (32°F) to 52°C (125°F)	0°C (32°F) to 52°C (125°F)
Power Source	Dual Voltage: 110-120V / 220-240V 50/60Hz Single Voltage: 220-240V 50/60Hz					
Oil Capacity	11.5oz/330ml	15.5 oz / 450 ml	14 oz / 400 ml	29 oz / 860 ml	28 oz / 830 ml	27 oz / 800 ml
Free Air Displacement	2 CFM @ 60Hz, 48 l/m @ 50Hz	4 CFM @ 60Hz, 96l/m @ 50Hz	6 CFM @ 60 Hz, 144 l / m @ 50 Hz	8 CFM @ 60 Hz, 192 l / m @ 50 Hz	10 CFM @ 60Hz, 240l/m @ 50Hz	12 CFM @ 60Hz, 288l/m @ 50Hz
Intake Fittings	1/4" SAE, 3/8" SAE, and 1/2"ACME	1/4" SAE, 3/8" SAE, and 1/2"ACME	1/4" SAE, 3/8" SAE, and 1/2"ACME	1/4" SAE, 3/8" SAE, and 1/2" SAE	1/4" SAE, 3/8" SAE, and 1/2" SAE	1/4" SAE, 3/8" SAE, and 1/2" SAE

PREMIUM VACUUM PUMP KEY FEATURES:

- Dual voltage operation
- 2 Stages
- Exceptional ultimate vacuum ratings, 10 microns
- Advanced air cooled motor design for operation in high ambient temperatures
- Proprietary oil mist free exhaust port cap for clean, safe job environment
- Gas ballast valve speeds achievement of deep vacuum
- Also Available in 220-240V 50/60Hz
- On-Off Power Switch
- Single Stage Models also available VP2S, VP4S, VP6S
- Multiple inlet port connections
- Easy maintenance with large oil sight glass and fill port with easily accessible oil drain port
- Heavy Gauge Aluminum Chasis with rubber lined steel handle and heavy duty rubber base
- Built in inlet check valve
- Includes 2 year warranty

VP6S

Pro-Set® PREMIUM VACUUM PUMPS

The VP6S Pro-Set Premium Series is a 6 CFM, single stage unit with a versatile dual voltage ½ HP motor. It boasts the same high-quality, high-value features engineered into all of our Pro-Set vacuum pumps, delivering excellent performance and years of reliable service.

VG200 DIGITAL VACUUM GAUGE

The VG200 is our digital vacuum gauge designed to monitor the entire evacuation process. It uses two keys—one to turn the unit on and off, and a second key to change between MICRONS, MILLIBAR, TORR and INCHES HG VAC any time during operation.

VG200 (For use with all Vacuum Pump Models)

Check out unit variations that bring Pro-Set engineering to your specific requirements. You'll find features such as ultimate vacuum ratings as low as 50 microns, an air-cooled motor design for operation in high ambient temperatures and a proprietary mist free exhaust port cap for a clean, safe job environment.

CE N11445

Oil Mist Port Cap

Brass T-Valve Adapter

Large Oil Sight Glass

VPXOMP PORT CAP

Oil mist preventer exhaust port.

VPXJ220 PORT CAP

220 VAC jumper power cord for locations where 110 voltage is not available.

SINGLE STAGE SPECIFICATIONS

Specifications	VP2S	VP4S	VP6S
Motor Size (HP) RPM @ 50/60Hz	1/4 (HP) 1440/1720	1/3 (HP) 2880/3440	1 / 2 (HP) 2880 / 3440
Dimensions (Inches)	12.2" X 5" X 9.6"	12.2" x 5" x 9.6"	13.1" x 5.5" x 10"
Weight	13.7 lb/ 6.2 kg	15.0 lb/ 6.8 kg	18.3 lb/8.3 kg
Operating Temperature Range	0°C (32°F) to 52°C (125°F)	0°C (32°F) to 52°C (125°F)	0°C (32°F) to 52°C (125°F)
Power Source	Single Voltage: 220-240V 50/60Hz *Dual Voltage: 110-120V / 220-240V 50/60Hz		
Oil Capacity	16 oz/ 470ml	16oz/ 470ml	19 oz/ 540ml
Free Air Displacement	2 CFM @ 60Hz, 48 l/m @ 50Hz	4 CFM @ 60Hz, 96l/m @ 50Hz	6 CFM @ 60 Hz, 144 l / m @ 50 Hz
Intake Fittings	1/4" SAE, 3/8" SAE, and 1/2"ACME	1/4" SAE, 3/8" SAE, and 1/2"ACME	1/4" SAE, 3/8" SAE, and 1/2"ACME

VACUUM PUMPS

PREMIUM COMPACT VACUUM PUMPS
SMALL SIZE, **BIG PERFORMANCE**

KEY FEATURES:

- Single or Dual Stage Models
- Innovative compact and lightweight design
- Exceptional ultimate vacuum rating
- Advanced air cooled motor design for operation in high ambient temperatures
- Proprietary oil mist free exhaust port cap for clean, safe job environment
- On-Off power switch for the Control System
- Intake Fitting size of 1/4" SAE and 1/2"ACME
- Heavy gauge aluminum chasis with impact resistant plastic base
- Thermally protected motor for overload protection
- Easy maintenance with large oil sight glass and fill port with easily accessible oil drain port
- Sure grip handle ergonomically designed for superior comfort and portability
- Extremely compact and portable design
- Operating tempature range of 0 °C (32 °F) to 52 °C (125 °F)
- Gas Ballast Valve
- Also inquire about our 12VDC battery operated models
- Includes 1 year warranty

Pro-Set® PREMIUM COMPACT VACUUM PUMPS

The VPC2S Premium Compact Pro-Set Vacuum Pump incorporates professional level features with extreme portability. This innovative 2 CFM, single-stage unit is certified to achieve an ultimate vacuum rating as low as 100 microns. With a weight of just 9.3 lbs (4.2 kg), it helps you get more done without weighing you down.

Delivering the same performance to portability, the VPC2D is a 2 CFM, dual stage unit that is factory-tested to deliver an ultimate vacuum rating as low as 15 microns, while weighing a mere 12.1 lb (5.5 kg). You'll find advanced air-cooling, easy maintenance and high impact plastic base for added shock resistance.

CE N11445

VPC2SE

Large Oil Sight Glass

Intake Port Brass Adapter

Rugged & Durable Power Cable

Specifications	VPC2DU	VPC2SU	VPC4SU
Stage	2	1	1
Motor Size (HP) RPM @ 50/60Hz	1/4 (HP) 2880 / 3440 RPM	1/5 (HP) 2880 / 3440 RPM	1/4 (HP) 2880 / 3440 RPM
Dimensions (Inches)	11.3" x 4.5" x 8.0"	9.1" x 4.5" x 8.0"	11.3" x 4.5" x 8.0"
Weight	12.1 lb / 5.5 kg	9.3 lb / 4.2 kg	11.0 lb / 5 kg
Power Source	115V 60 Hz	115V 60 Hz	115V 60 Hz
Ultimate Vacuum	15 Microns	as low as 100 Microns	as low as 100 Microns
Oil Capacity	9 oz / 250 ml	9 oz / 250 ml	10 oz / 300 ml
Free Air Displacement	2 CFM @ 60hz, 48l/m @ 50Hz	2 CFM @ 60 Hz, 48 l / m @ 50 Hz	4 CFM @ 60 Hz, 96 l / m @ 50 Hz
Specifications	**VPC2DE**	**VPC2SE**	**VPC4SE**
Stage	2	1	1
Motor Size (HP) RPM @ 50/60Hz	1/4 (HP) 2880 / 3440 RPM	1/5 (HP) 2880 / 3440 RPM	1/4 (HP) 2880 / 3440 RPM
Dimensions (Inches)	11.3" x 4.5" x 8.0"	9.1" x 4.5" x 8.0"	11.3" x 4.5" x 8.0"
Weight	12.1 lb / 5.5 kg	9.3 lb / 4.2 kg	11.0 lb / 5 kg
Power Source	220-240V 50/60 Hz	220-240V 50/60 Hz	220-240V 50/60 Hz
Ultimate Vacuum	15 Microns	as low as 100 Microns	as low as 100 Microns
Oil Capacity	9 oz / 250 ml	9 oz / 250 ml	10 oz / 300 ml
Free Air Displacement	2 CFM @ 60hz, 48l/m @ 50Hz	2 CFM @ 60hz, 48l/m @ 50Hz	4 CFM @ 60Hz, 96l/m @ 50Hz

VACUUM PUMPS

VPASU

VPAS8

ACCESSORIES

ITEM	DESCRIPTION
VPAS4	1/4” SAE Female Knurl Nut
VPAS8	3/8” SAE Female Knurl Nut
VPASU	1/4” SAE, 3/8” SAE, 1/2”-20 (UNF Female Knurl Nut)
AVCVAC	Vacuum pump cap kit with chains
PREMIUM VACUUM PUMP OILS	
VPOG6	(6) one gallon bottles
VPOQ12	(12) one quart bottles
VPOP12	(12) one pint bottles

Vacuum pump cap kit with chains on one common ring

AVCVAC

1/2” ACME

1/4” SAE

1/2” SAE

3/8” SAE

ANTI-SIPHON VALVE KITS

The CPS anti-siphon valve is an essential accessory to any vacuum pump application. The anti-siphon valve prevents the cross-contamination of vacuum pump oil and the compressor oil in the A/C or refrigeration system being serviced. Mixing of vacuum pump oil and compressor oil can cause premature failure in the A/C or refrigeration system. CPS makes three models that fit all CPS and other brands of vacuum pumps.

Add these kits to any brand of vacuum pump to prevent the cross-contamination of vacuum pump oil and the compressor oil of the system being serviced.

VPAS4 - 1/4” SAE Female Knurl Nut
VPAS8 - 3/8” SAE Female Knurl Nut
VPASU - 1/4” SAE, 3/8” SAE, 1/2”-20 UNF Female Knurl Nut

PREMIUM VACUUM PUMP OILS

PRO-SET Premium Vacuum Pump Oil is an extremely high quality, severely hydrotreated vacuum pump oil. The oil is compatible for use in pumps made by most manufacturers. PRO-SET Premium Vacuum Pump Oil should always be clean and free of contaminants such as moisture, acids, vapors, dirt etc. It is strongly recommended that the vacuum pump oil be changed after each use to improve service and the life of the pump.

VPOP12 VPOQ12 VPOG6

RECOVERY EQUIPMENT

RECOVER REFRIGERANTS QUICKLY & EFFICIENTLY

RECOVERY EQUIPMENT

RECOVER LOST TIME

The **Smallest**, **Lightest**, **Fastest** and **Most Reliable** Recovery Machine found anywhere in the world

Premium Brass Fittings

Manual HP Reset Button (TR21E only)

TR21

Pro-Set®

The Workingman's Choice™

BUILT FOR PERFORMANCE:

5 years of intensive product research and development have produced the Pro-Set® TR21, the smallest, lightest, fastest and most reliable recovery machine found anywhere in the world. That means you can get the job done more effectively, with less effort, in half the time.

TR21 SPECIFICATIONS

Compressor Type	2 Cylinder Oil-less Reciprocating Compressor
Dimensions	15cm (6") Wide x 30cm (12") Long x 23cm (9") High
Weight	24.5 lb
Operating Temperature Range	0˚C (32˚F) to 49˚C (120˚F)
Power Source	115 V 50/60 Hz
Power Consumption	850 W
Filtration	Cleanable 100 - mesh screen integrated into Suction Port
Overload Protection	Motor Thermally Protected
High Pressure Shut-Off	550 psig
Refrigerants	R-12, R-134a, R-401C, R-406A, R-500, R-401A, R-409A, R-401B, R-412A, R-411A, R-407D, R-22, R-411B, R-502, R-407C, R-402B, R408A, R-509, R-407A, R-404A, R-402A, R-507, R-407B, R-410A

	R410A VAPOR @75		R410A DIRECT LIQUID		R410A PUSH PULL	
	LBS	KG	LBS	KG	LBS	KG
PRO-SET® TR21	.703	.319	11.95	5.42	31.70	14.38
APPION G5	.396	.180	3.48	1.58	10.21	4.63
APPION G1	.264	.120	4.32	1.96	12.17	5.52
ATP RG5410EX	.443	.201	5.14	2.33	14.13	6.41
RITCHIE XLT95760	.490	.220	1.68	0.76	12.21	5.54
REFTEC DIABLO-115	.220	.100	4.98	2.26	15.00	6.80
INFICON VORTEX AC	.287	.130	3.46	1.57	11.35	5.15
BACHARACH STINGER	.310	.140	3.26	1.48	16.29	7.39

* Chart data was obtained from published UL/ARI test results per ARI 740-98 Standards for Recovery Equipment

ADDITIONAL MODELS

TR21C Features	Same as TR21 except: 450 psig high pressure shut-off. Automatic reset 115V 50/60 Hz
TR21E Features	Same as TR21 except: 525 psig high pressure shut-off. Manual reset 220-240V 50 Hz
TR21J Features	Same as TR21 except: 550 psig high pressure shut-off. Automatic reset Tank overfill sensor cord 100V 50/60 Hz
TR21S Features	Same as TR21 except: 550 psig high pressure shut-off. Automatic reset 220-240V 50/60 Hz
TR22 Features	Same as TR21, but with Tank overfill sensor cord
TR22S Features	Same as TR21S, but with Tank overfill sensor cord

TR21 RECOVERY RATES PER ARI - 740 - 98

	LBS / MIN				KG / MIN			
Type	Push Pull	Liquid	Vapor	High Temp Vapor (104°)	Push Pull	Liquid	Vapor	High Temp Vapor (104°)
R22	31.53	8.86	0.597	0.860	14.30	4.02	0.271	0.390
R134a	25.66	7.80	0.503	N/A	11.64	3.54	0.228	N/A
R407C	29.14	9.50	0.536	N/A	13.22	4.31	0.243	N/A
R410A	31.70	11.95	0.703	0.816	14.38	5.42	0.319	0.370

ENHANCE THE PERFORMANCE OF YOUR RECOVERY MACHINE

COMPARATIVE DATA

Test results show time to recover 15 lbs of R22 at 120° F:

With MT69 = 17 minutes
Without MT69 = 32 minutes

THIS IS WHAT IT DOES:

- Up to 95% increase in recovery speed
- Actual time to recover 15 lbs. of R22 at 120 °F is 17 minutes with MT69 vs. 32 minutes without MT69
- The hotter it gets, the better it works
- Eliminates the need to change tanks when recovering R410A
- Eliminates annoying shutdown due to high pressure switch limit
- Dramatically improves the performance of any recovery machine
- Essential for recovering R410A on hot days
- Essential for recovering liquid refrigerant on cold days
- Eliminates liquid slugging at colder temperatures
- Patented and Patents Pending

TIME IS MONEY

Transform your Bottom line with the MT69 Molecular Transformator.

MT69 SPECIFICATIONS

Dimensions	4" D x 12" H
Weight	5 lbs
Maximum Operation Pressure	550 psig
Discharge Pressure Gauge	0 to 600 PSIG
Inlet/Outlet Connections	1/4" SAE Male
Performance	up to 9000 Btu's

MT69

CR700

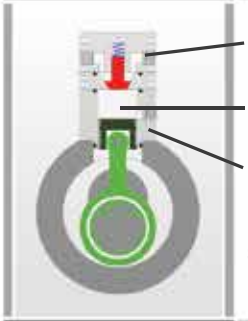
PRO-SET® OIL-LESS REFRIGERANT RECOVERY MACHINES

- Powerful 1HP oil-less reciprocating recovery compressor
- Exceptional compressor, condensing & cooling systems allow fast recovery in high temperature environments
- Automatic Low Pressure shut-off feature turns unit off when recovery is completed
- Rugged high density double walled plastic housing with easy view top mounted controls
- R-410a ready with 550psi high pressure shut-off switch
- Ergonomic well balanced design for easy transport including shoulder strap - weighs 36 lbs / 16.2 kg
- Built-in suction filter located under suction port
- Worlwide patents pending.

MADE IN U.S.A.

- Compact design with easy 4 bolt access
- Compressor can be rebuilt in minutes
- Externally serviceable valves and gauges
- Integrated component moorings for quiet operation
- Fewer components equals more reliablity

SUCTION PORT DESIGN



Unique suction port design eliminates suction valve & precisely meters incoming refrigerant.

UL CERTIFIED

meets or exceed EPA Regulations per ARI Standard 740-98

CR700 Series

ITEM:	VOLTAGE	GAUGES
CR700	115V	psig/kgcm2
CR700E	220-240V	BAR/kPa
CR700S	230V	psig/kgcm2
CR700J	100V	MPa

- Powerful 1HP oil-less reciprocating recovery compressor
- Oversized piston head & cylinder combined with a larger discharge port
- No suction valve eliminates failures caused by liquid slugs
- Heavy duty components with special long-lasting composite seals

		Test Conditions at 75 F Degrees			104 F Degrees	
Brand Models	Refrigerant	Liquid (kg/m)	Push / Pull (kg/m)	Vapor (kg/m)	High Temp Vapor (kg/m)	NRTL Ratings
CPS CR700	R410a	2.95	6.97	0.23		(UL) QVBC SA12068
Appion G5	R410a	1.58	4.63	0.30		(UL) QVBC SA13136
Yellow Jkt 95760	R410a	0.76	5.54	0.22		(UL) QVBC SA12038
Promax RG5410EX	R410a	2.33	6.39	0.20		(UL) QVBC SA12994
Promax RG5410A	R410a	1.85	4.91	0.16		(UL) QVBC SA12994
Inficon Vortex AC	R410a	1.66	5.15	0.08		(UL) QVBC SA12798
Stinger 2000-3300	R410a	1.37	6.63	0.10		(AR) RRRE-05040-1Q
CPS CR700	R22	3.11	7.17	0.22	0.242	(UL) QVBC SA12068
Appion G5	R22	2.82	7.54	0.28	0.19	(UL) QVBC SA13136
Yellow Jkt 95760	R22	0.90	6.12	0.15	0.15	(UL) QVBC SA12038
Promax RG5410EX	R22	1.90	6.58	0.18	0.14	(UL) QVBC SA12994
Promax RG5410A	R22	1.81	4.32	0.15	0.13	(UL) QVBC SA12994
Inficon Vortex AC	R22	1.35	2.50	0.11	0.13	(UL) QVBC SA12798
Stinger 2000-3300	R22	1.60	5.58	0.13	0.13	(AR) RRRE-05040-1Q
CPS CR700	R134	2.15	6.30	0.15		(UL) QVBC SA12068
Appion G5	R134	1.97	5.03	0.19		(UL) QVBC SA13136
Yellow Jkt 95760	R134	1.13	6.12	0.10		(UL) QVBC SA12038
Promax RG5410EX	R134	1.09	5.30	0.14		(UL) QVBC SA12994
Promax RG5410A	R134	1.57	3.63	0.11		(UL) QVBC SA12994
Inficon Vortex AC	R134	1.13	3.44	0.10		(UL) QVBC SA12798
Stinger 2000-3300	R134	1.21	4.98	0.10		(AR) RRRE-05040-1Q

	CR700	CR700J	CR700E	CR700S
Compressor Type	1 HP oil-less reciprocating compressor			
Dimensions	20cm (8”) wide x 37cm (14.5”) long x 30.5cm (12”) high			
Weight	15.3kg (34lbs.)			
Oprtg. Temp. Range	0°C (32°F) to 49°C (120°)			
Power Source	115V 50/60Hz 1 HP	100V 50/60Hz 1 HP	220-240V 50/60 Hz 1 HP	230V 50/60 Hz 1 HP
Power Consumption	850 W			
Filtration	Cleanable 100-mesh screen integrated into Suction Port			
Shut-off valves	Both Suction and Discharge piston manifold valves			
Overload Protection	15 amp		8 amp	

Replacement Parts	
CRXCR1	Compressor Rebuild Kit for CR600 (all)
CRXCR2	Compressor Rebuild Kit for CR500 (115V)
CRXCR3	Compressor Rebuild Kit for CR500 (230V)
CRXCR8	Compressor Rebuild Kit for CR700 (all)
CRXTOS2	CR Overfill Sensor Cord Kit 115V
CRXTOS2	CR Overfill Sensor Cord Kit 230V
CRXF2	(6) Suction Filters for CR300, 400, 500, 600
CRXF3	(6) Suction Filters for CR700

CR700S

RECOVERY EQUIPMENT

REFRIGERANT RECOVERY TANKS

PRO-SET Premium Vacuum Pump Oil is an extremely high quality, severely hydrotreated vacuum pump oil. The oil is compatible for use in pumps made by most manufacturers. PRO-SET Premium Vacuum Pump Oil should always be clean and free of contaminants such as moisture, acids, vapors, dirt etc. It is strongly recommended that the vacuum pump oil be changed after each use to improve service and the life of the pump.

TANK SPECIFICATIONS

ITEM	DESCRIPTION	WATER CAPACITY	DOT SPECIFICATION	SERVICE PRESSURE
ARX134T	Automotive 50lb tank with 1/2" ACME M fitting	47.7lb / 21.7kg	DOT04BA-400	400 PSIG
ARX134TS	Automotive 50lb tank with 1/2" ACME M fitting and overfill sensor	47.7lb / 21.7kg	DOT04BA-400	400 PSIG
CRX390T	90lb tank with 1/4" SAE M fitting on tank. 1/4" SAE FM x 1/2" ACME M adapter fitting included	92 lb / 41.7kg	DOT04BW-400	400 PSIG
CRX390TS	90lb tank with 1/4" SAE M fitting on tank and overfill sensor. 1/4" SAE FM x 1/2" ACME M adapter fitting included	92 lb / 41.7kg	DOT04BW-400	400 PSIG
CRX400T	50lb tank with 1/4" SAE M fitting	47.7lb / 21.7kg	DOT04BA-400	400 PSIG
CRX400TS	50lb tank with 1/4" SAE M fitting and overfill sensor	47.7lb / 21.7kg	DOT04BA-400	400 PSIG
CRX430T	30lb tank with 1/4" SAE M fitting	26.2lb / 11.9kg	DOT04BA-400	400 PSIG
CRX430TS	30lb tank with 1/4" SAE M fitting and overfill sensor	26.2lb / 11.9kg	DOT04BA-400	400 PSIG

CRX390T
1/4" SAE & 1/2" ACME Tank Adapter

CRX390TS
1/4" SAE with float

CRX430T
1/4" SAE Tank

ARX134T
1/2" ACME (AR300/400) U.S. Automotive

CRX400T
1/4" SAE Tank

CRX430T
1/4" SAE Tank with float

ARX134TS
1/2" ACME with float (AR500)

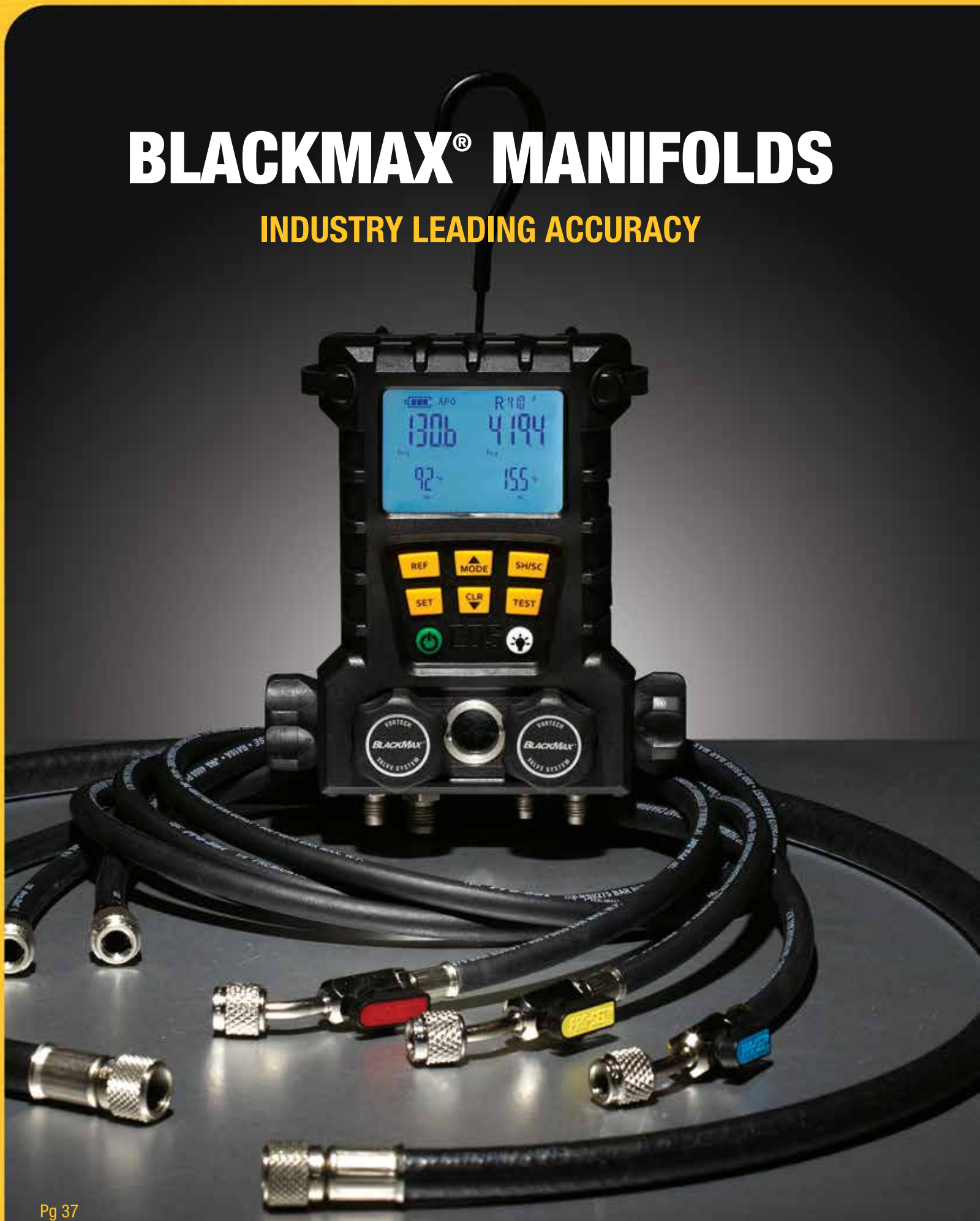
CRX400TS
1/4" SAE Tank with float

SERVICE MANIFOLDS & GAUGES

MECHANICAL & DIGITAL MANIFOLD SOLUTIONS

BLACKMAX® MANIFOLDS

INDUSTRY LEADING ACCURACY



MANIFOLDS & GAUGES

MD100

BLACKMAX® DIGITAL MANIFOLD SERIES

BLACKMAX digital manifolds from CPS Products, Inc. combine the latest manifold design and electronic measurement features into one easy-to-use, accurate and water resistant product in a rugged nylon plastic housing, incorporating a durable elastomeric keypad and large backlighted LCD display.

Rugged Design
- Water Resistant High Strength Glass Filled Nylon Housing
- Precision Machined Anodized Aluminum Manifold Body
- Proprietary Vortech Valve Systems (certified to 10 microns)
- High-impact polycarbonate LCD Window
- Advanced sight glass design

Simplicity & Versatility
- One key ON/OFF and function select
- Preloaded with over 90 of the most common Refrigerants
- Compatible with R744 subcritical CO2 Refrigerants
- One-touch access to your 5 favorite refrigerants
- Performs pressure decay and vacuum rise tests
- 25 hours of continuous use with full backlight illumination

Best-in-Class Accuracy
- Pressure: 1% of reading Pressure
- Temperature: Superior Thermistor Sensors for +/- 0.2°C (+/- 0.4°F) Accuracy
- Vacuum: Direct System Attachment achieves +/- 10 microns from 0 to 25,000 microns

Full System Measurement
- 2 Pressures, 2 Temperatures & Vacuum (using MDXVG accessory)
- Vacuum Rise and Pressure Decay Test Functions
- Simultaneously Displays:
  HI & LO Pressures, Superheat & Subcooling
  HI & LO Pressures, T1 & T2
  HI & LO Pressures, Saturation T1 & Saturation T2
  HI & LO Pressures, Displays T1, T2 & Delta T

ITEM	NORTH AMERICA	SOUTH AMERICA	AUSTRALIA
MD50	2V Digital Manifold with (2) Clamp Probes		
MD50HE	2V Digital Manifold with (2) Clamp Probes and 5' Hoses		
MD50VHE	2V Digital Manifold with (2) Clamp Probes and 5' BV Hoses & Vac accessory		
MD100	4V Digital Manifold with (2) Clamp Probes		
MD100HE	4V Digital Manifold with (2) Clamp Probes and 5' Hose		
MD100VHE	4V Digital Manifold with (2) Clamp Probes, a 5' BV Hose & Vac accessory		
MDXVG	MD50/100 Vacrometer Accessory		
MDXBK	MD50/100 Rechargeable Battery Kit		

BLACKMAX® MANIFOLDS

ENGINEERED FOR PERFORMANCE & RELIABILITY

MANIFOLDS & GAUGES

MV4H4P5EZ

BLACKMAX® MANIFOLDS
BLACK & CHROME SERIES

BlackMax Black & Chrome series anodized aluminum block body with three 1/4" SAE and one 3/8" SAE vacuum port (4 Valve Manifold only), Vortech Deep Vacuum Valves, extra large sight glass, easy-to-read Class 1.0 accuracy gauges, protective gauge boots and hanging hook.
MADE IN USA

MV2H4Z

MV4H4Z

BLACKMAX® BLACK & CHROME VORTECH VALVE MANIFOLDS

	SPECIFICATIONS	NORTH AMERICA	SOUTH AMERICA
GAUGE DESCRIPTION	Refrigerant Scales	R134a, R22, R404a, R410a	R410a, R22, R407c
	Gauge Size / Type	3 1/8" (80mm) Class 1.0 Accuracy	3 1/8" (80mm) Class 1.0 Accuracy
	* Gauges built with Internal Silicon Dampening Cup for Flutter-Free operation		
	Pressure Scales	PSI	BAR / PSI
	Temperature Scales	°F	˚C
FITTINGS	Manifold and Hose Fittings	1/4" SAE 45° Fittings	1/4" SAE 45° Fittings
TWO VALVE MANIFOLDS	Manifold & Gauges Only	MV2H4Z	MV204Z
	3 Premium 5ft (150cm) Pro-Set Black & Chrome Hoses	MV2H4P5Z	MV204P5Z
	3 Premium 5ft (150cm) Pro-Set Black & Chrome BV Hoses	MV2H4P5EZ	MV204P5EZ
FOUR VALVE MANIFOLDS	Manifold & Gauges Only	MV4H4Z	MV404Z
	3 Premium 5ft (150cm) Pro-Set Black & Chrome Hoses	MV4H4P5Z	MV404P5Z
	3 Premium 5ft (150cm) Pro-Set Black & Chrome BV Hoses	MV4H4P5EZ	MV404P5EZ
REPLACEMENT GAUGES	Low Side Gauge	RGH4L	RGO4L
	High Side Gauge	RGH4H	RGO4H

MANIFOLDS & GAUGES

BLACKMAX® MANIFOLDS
BLACK & CHROME SERIES

BlackMax Black & Chrome series 2 valve anodized aluminum block body with ¼" SAE 45° fittings, Triple Seal piston valves, easy-to-read 3 1/8" (80mm) Class 1.0 accuracy gauges, protective gauge boots, extra access port in center with Schrader valve, premium 5ft Pro-Set Black & Chrome hoses with 45° anti blowback valves on end and hanging hook. MADE IN USA

MBH4P5EZ

BLACKMAX® MANIFOLD CONFIGURATIONS

BLACKMAX® BLACK & CHROME TRIPLE SEAL VALVE MANIFOLDS

	SPECIFICATIONS	NORTH AMERICA	NORTH AMERICA	NORTH AMERICA SOUTH AMERICA AUSTRALIA	SOUTH AMERICA
GAUGE DESCRIPTION	Refrigerant Scales	R134a, R22, R404a, R410a	R134a, R22, R404a, R410a	R410a	R410A, R22, R407C
	Gauge Size / Type * Gauges built with Internal Silicon Dampening Cup	3 1/8" (80mm) Class 1.0 Accuracy	2 1/2" (68mm) Class 1.6 Accuracy	2 1/2" (68mm) Class 1.6 Accuracy	3 1/8" (80mm) Class 1.0 Accuracy
	Pressure Scales	PSI	PSI	PSI / kPa	BAR / PSI
	Temperature Scales	°F	°F	°F / °C	°C
FITTINGS	Manifold and Hose Fittings	1/4" SAE 45° Fittings	1/4" SAE 45° Fittings	1/4" SAE 45° Fittings	1/4" SAE 45° Fittings
TWO VALVE MANIFOLDS	Manifold & Gauges Only	MBH4Z	MBH5Z	MBB5Z	MBO4Z
	3 5ft (150cm) Pro-Set Black & Chrome Premium Hoses	MBH4P5Z	MBH5P5Z	MBB5P5Z	MBO4P5Z
	3 5ft (150cm) Pro-Set Black & Chrome Premium BV Hoses	MBH4P5EZ	MBH5P5EZ	MBB5P5EZ	MBO4P5EZ
REPLACEMENT GAUGES	Low Side Gauge	RGH4L	RGH5L	RGB5L	RGO4L
	High Side Gauge	RGH4H	RGH5H	RGB5H	RGO4H

HP5BKZ

5' Black Premium Chrome Charging Hoses

HP5BKEZ

5' Black Premium Anti-Blowback Chrome Charging Hoses

HV5Z

5' Black 3/8" Premium Chrome Hose

BLACKMAX® MANIFOLDS BLACK & CHROME SERIES

BlackMax Black & Chrome series 2 valve anodized aluminum block body with ¼" SAE 45° fittings, Triple Seal piston valves, easy-to-read 3 1/8" (80mm) Class 1.0 accuracy gauges, protective gauge boots, extra access port in center with Schrader valve, premium 5ft Pro-Set Black & Chrome hoses with 45° anti blowback valves on end and hanging hook. MADE IN USA

RGH4L

RGH4H

RGH5L

RGH5H

RGX68IB

MBH5P5EZ

RGX80IB

PRO-SET® BLACK & CHROME PRESSURE GAUGES

		3 1/8" /80mm Pressure Gauges		2 1/2" /68mm Pressure Gauges	
ITEM SPECIFICATIONS		NORTH AMERICA	SOUTH AMERICA	NORTH AMERICA	NORTH AMERICA SOUTH AMERICA AUSTRALIA
GAUGE DESCRIPTION	Refrigerant Scales	R134a, R22, R404a, R410a	R410A, R22, R407C	R134a, R22, R404a, R410a	R410a
	Gauge Size / Type * Gauges built with Internal Silicon Dampening Cup	3 1/8" (80mm) Class 1.0	3 1/8" (80mm) Class 1.0	2 1/2" (68mm) Class 1.6	2 1/2" (68mm) Class 1.6
	Pressure Scales	PSI	BAR / PSI	PSI	PSI / kPa
	Temperature Scales	°F	°C	°F	°F / °C
GAUGE ONLY	Low Side Gauge	RGH4L	RGO4L	RGH5L	RGB5L
	High Side Gauge	RGH4H	RGO4H	RGH5H	RGB5H
RUBBER BOOT	Item Number	RGX80IB	RGX80IB	RGX68SB	RGX68IB
	Description	Ribbed Design	Ribbe Design	Spider Design	Spider Design

PREMIUM PISTON SERIES

PROPRIETARY TRIPLE SEAL VALVES
BEST IN CLASS 1% MEASUREMENT ACCURACY

MANIFOLDS & GAUGES

MT2H7P5E

PRO-SET® MANIFOLDS WORKINGMAN SERIES

The Workingman's Choice series 2 valve anodized aluminum block body with 1/4" SAE 45° fittings, Triple Seal piston valves, sure grip rubber over metal valve handles, easy-to-read 3-1/8" (80mm) Class 1.0 accuracy gauges, protective gauge boots, extra access port in center with Schrader valve and hanging hook.

PRO-SET® WORKINGMAN'S CHOICE 2 VALVE MANIFOLDS

	SPECIFICATIONS	NORTH AMERICA	SOUTH AMERICA
GAUGE DESCRIPTION	Refrigerant Scales	R134a, R22, R404a, R410a	R410a, R22, R407c
	Gauge Size / Type	3 1/8" (80mm) Class 1.0 Accuracy	3 1/8" (80mm) Class 1.0 Accuracy
	* Gauges built with Internal Silicon Dampening Cup for Flutter-Free operation		
	Pressure Scales	PSI	BAR / PSI
	Temperature Scales	°F	˚C
FITTINGS	Manifold and Hose Fittings	1/4" SAE 45° Fittings	1/4" SAE 45° Fittings
TWO VALVE MANIFOLDS	Manifold & Gauges Only	MT2H7	MT207
	3 Premium 5ft (150cm) Pro-Set Hoses	MT2H7P5	MT207P5
	3 Premium 5ft (150cm) Pro-Set AB Hoses	MT2H7P5A	MT207P5A
	3 Premium 5ft (150cm) Pro-Set BV Hoses	MT2H7P5E	MT207P5E
REPLACEMENT GAUGES	Low Side Gauge	RGH7L	RG07L
	High Side Gauge	RGH7H	RG07H
	Replacement Gauge Boot	RGXBW	RGXBW

PISTON SERIES - BLACK BODY

PROPRIETARY TRIPLE SEAL VALVES

MANIFOLDS & GAUGES

PISTON BLACK BODY MANIFOLD SERIES

Piston series 2 valve anodized aluminum block body with ¼" SAE 45° fittings, Triple Seal piston valves, 2 ½" (68mm) Class 1.6 accuracy gauges, extra access port in center with Schrader valve and hanging hook. MADE IN USA

MBDP5E

MBH

MBC

MBD

TRIPLE SEAL™ PISTON 2 VALVE BLACK BODY MANIFOLDS

	SPECIFICATIONS	N. AMERICA	N. AMERICA	N. AMERICA	S. AMERICA ASIA	S. AMERICA AUSTRALIA	S. AMERICA
GAUGE DESCRIPTION	Refrigerant Scales	R12, R22, R502	R134a, R22, R404a	R22, R404a, R410a,	R12, R134a, R22	R134a, R22, R404a	R410a, R22, R407c
	Gauge Size / Type	2 1/2" (68mm) Class 1.6 Accuracy	2 1/2" (68mm) Class 1.6 Accuracy	2 1/2" (68mm) Class 1.6 Accuracy	2 1/2" (68mm) Class 1.6 Accuracy	2 1/2" (68mm) Class 1.6 Accuracy	2 1/2" (68mm) Class 1.6 Accuracy
	* Gauges built with Internal Silicon Dampening Cup for Flutter-Free operation						
	Pressure Scales	PSI	PSI	PSI	PSI / kPa	PSI / kPa	BAR / PSI
	Temperature Scales	°F	°F	°F	°F / °C	°C	°C
FITTINGS	Manifold and Hose Fittings	1/4" SAE 45° Fittings	1/4" SAE 45° Fittings	1/4" SAE 45° Fittings	1/4" SAE 45° Fittings	1/4" SAE 45° Fittings	1/4" SAE 45° Fittings
TWO VALVE MANIFOLDS	Manifold & Gauges Only	MBC	MBD	MBH	MBZ	MBT	MBO
	Three 3ft (150cm) Pro-Set Hoses	MBCS3	MBDP3	MBHP3	MBZS3	MBTP3	MBOP3
	Three 5ft (150cm) Pro-Set Hoses	MBCS5	MBDP5	MBHP5	MBZS5	MBTP5	MBOP5
	Three 5ft (150cm) Pro-Set AB Hoses	NA	MBDP5A	MBHP5A	NA	MBTP5A	MBOP5A
	Three 5ft (150cm) Pro-Set BV Hoses	NA	MBDP5E	MBHP5E	NA	MBTP5E	MBOP5E
REPLACEMENT GAUGES	Low Side Gauge	RGCL	RGDL	RGHL	RGZL	RGTL	RGOL
	High Side Gauge	RGCH	RGDH	RGHH	RGZH	RGTH	RGOH

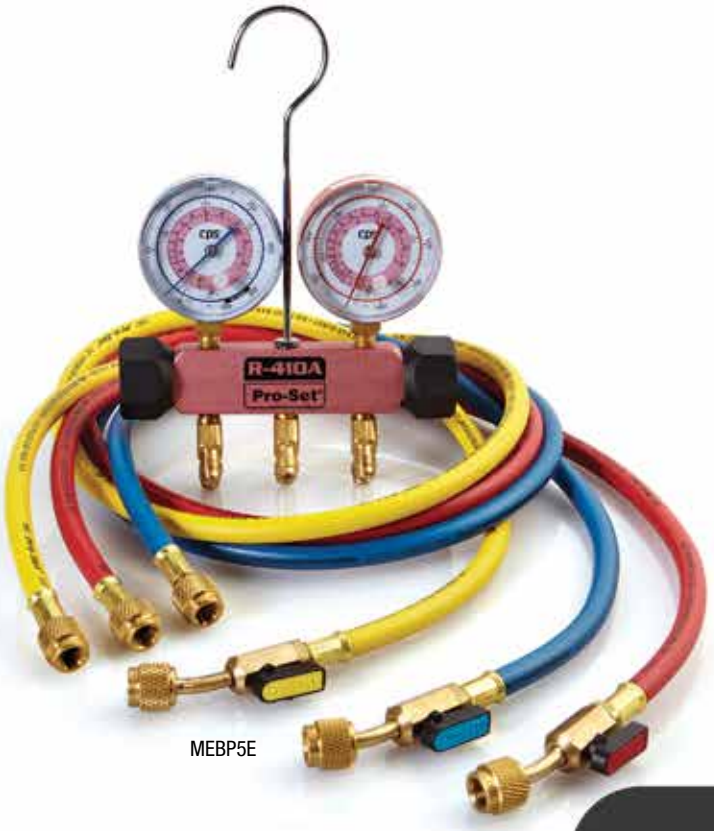
PISTON SERIES - PINK BODY

PROPRIETARY TRIPLE SEAL VALVES

MANIFOLDS & GAUGES

PISTON PINK BODY MANIFOLD SERIES

Piston series 2 valve anodized aluminum block body with ¼" SAE 45° fittings, Triple Seal piston valves, 2 ½" (68mm) Class 1.6 accuracy gauges, extra access port in center with Schrader valve and hanging hook. MADE IN USA



MEBP5E

MEB

MEH

NON-FLUTTER GAUGE
Design with Rugged Metal Housing

FRONT CALIBRATION
Access Port

ANODIZED ALUMINUM
Block Body

EASY-TO-GRAB
Large Knob

Triple Seal™ VALVES

- Three Super Neoprene o-ring design
- Back-seating o-ring seals valve nut when fully open
- Floating nylon sealing disk
- Valve stems retract fully to provide maximum flow
- Mirror-like port finish for smooth valve movement

TRIPLE SEAL™ PISTON 2 VALVE PINK BODY MANIFOLDS

	SPECIFICATIONS	N. AMERICA	N. AMERICA	S. AMERICA AUSTRALIA
GAUGE DESCRIPTION	Refrigerant Scales	R410a	R410a, R22, R404a	R410a
	Gauge Size / Type	2 1/2" (68mm) Class 1.6 Accuracy	2 1/2" (68mm) Class 1.6 Accuracy	2 1/2" (68mm) Class 1.6 Accuracy
	*Gauges built with Internal Silicon Dampening Cup for Flutter-Free operation			
	Pressure Scales	PSI / kPa	PSI	PSI / kPa
	Temperature Scales	°F / °C	°F	°F / °C
FITTINGS	Manifold and Hose Fittings	1/4" SAE 45° Fittings	1/4" SAE 45° Fittings	1/2" - 20 UNF
TWO VALVE MANIFOLDS	Manifold & Gauges Only	MEB	MEH	MCB
	3 Premium 3ft (150cm) Pro-Set Hoses	MEBP3	MEHP3	MCBJ3
	3 Premium 5ft (150cm) Pro-Set Hoses	MEBP5	MEHP5	MCBJ5
	3 Premium 5ft (150cm) Pro-Set AB Hoses	MEBP5A	MEHP5A	MCBJ5A
	3 Premium 5ft (150cm) Pro-Set BV Hoses	MEBP5E	MEHP5E	MCBJ5E
REPLACEMENT GAUGES	Low Side Gauge	RGBL	RGHL	RGBL
	High Side Gauge	RGBH	RGHH	RGBH

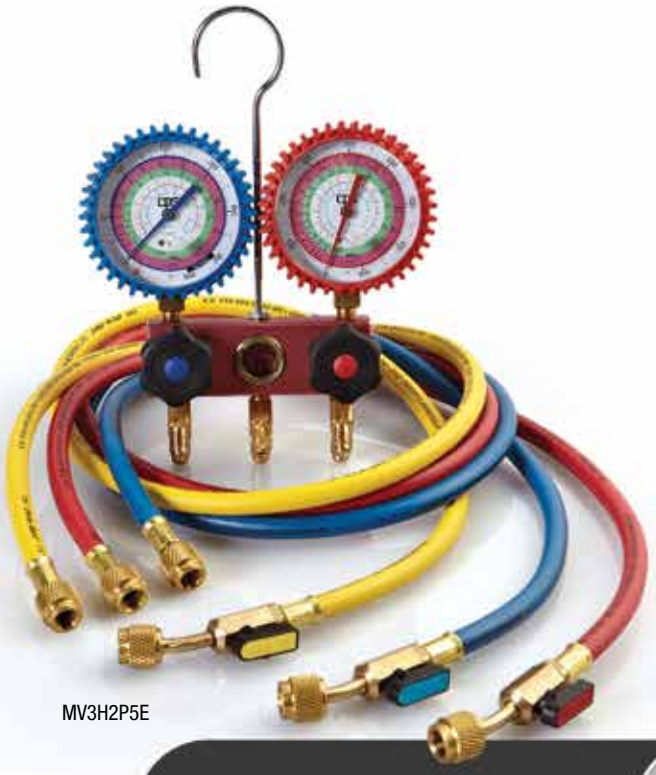
DEEP VACUUM MULTI-VALVE SERIES

PROPRIETARY VORTECH VALVE SYSTEMS

MANIFOLDS & GAUGES

VORTECH® DEEP VACUUM MANIFOLD SERIES

Deep Vacuum series 2 valve pink anodized aluminum block body with ¼" SAE 45° fittings, Vortech Deep Vacuum Valves, extra large sight glass, easy-to-read 3 1/8" (80mm) Class 1.6 accuracy gauges, protective gauge boots, extra access port in center with Schrader valve and hanging hook. MADE IN USA


MV3H2P5E

MV3H2

MV3H3

MV13H2

MV13H3

VORTECH DEEP VACUUM VALVE MANIFOLDS

	SPECIFICATIONS	N. AMERICA	N. AMERICA	S. AMERICA	S. AMERICA / AUSTRALIA
GAUGE DESCRIPTION	Refrigerant Scales	R410a. R22, R404a, R134a	R410a, R22, R404a, R143a	R410a, R22, R407c	R410a
	Gauge Size / Type	3 1/8" (80mm) Class 1.6 Accuracy	3 1/8" (80mm) Class 1.6 Accuracy *Oil-Filled	3 1/8" (80mm) Class 1.6 Accuracy	3 1/8" (80mm) Class 1.6 Accuracy *Oil-Filled
	* Gauges built with Internal Silicon Dampening Cup for Flutter-Free operation				
	Pressure Scales	PSI	PSI	PSI / bar	PSI / kPa
	Temperature Scales	°F	°F	°C	°F / °C
FITTINGS	Manifold and Hose Fittings	1/4" SAE 45° Fittings	1/4" SAE 45° Fittings	1/4" SAE 45° Fittings	1/4" SAE 45° Fittings
TWO VALVE MANIFOLDS	Manifold & Gauges Only	MV3H2	MV3H3	MV3O2	MV3B3
	3 Premium 5ft (150cm) Pro-Set Hoses	MV3H2P5	MV3H3P5	MV3O2P5	MV3B3P5
	3 Premium 5ft (150cm) Pro-Set AB Hoses	MV3H2P5A	MV3H3P5A	MV3O2P5A	MV3B3P5A
	3 Premium 5ft (150cm) Pro-Set BV Hoses	MV3H2P5E	MV3H3P5E	MV3O2P5E	MV3B3P5E
FOUR VALVE MANIFOLDS	Manifold & Gauges Only	MV13H2	MV13H3	MV13O2	MV13B3
	3 Premium 5ft (150cm) Pro-Set Hoses	MV13H2P5	MV13H3P5	MV13O2P5	MV13B3P5
	3 Premium 5ft (150cm) Pro-Set AB Hoses	MV13H2P5A	MV13H3P5A	MV13O2P5A	MV13B3P5A
	3 Premium 5ft (150cm) Pro-Set BV Hoses	MV13H2P5E	MV13H3P5E	MV13O2P5E	MV13B3P5E
REPLACEMENT GAUGES	Low Side Gauge	RGH2LB	RGH3L	RGO2LB	RGB3L
	High Side Gauge	RGH2HB	RGH3H	RGO2HB	RGB3H

MANIFOLDS & GAUGES

VORTECH™ DEEP VACUUM MANIFOLD SERIES

Deep Vacuum series 5 valve anodized aluminum block body with four ¼" SAE ports, one 3/8" SAE vacuum port, Vortech Deep Vacuum Valves, VG200 electronic vacuum gauge, extra large sight glass, easy-to-read 3 3/8" (80mm) Class 1.6 accuracy gauges, protective gauge boots, two hanging hooks and plastic carrying case.
MADE IN USA

MV5H2D

DEEP VACUUM MANIFOLD CONFIGURATIONS

VORTECH™ DEEP VACUUM 5 VALVE BLACK BODY MANIFOLDS

	SPECIFICATIONS	N. AMERICA	N. AMERICA	S. AMERICA	S. AMERICA / AUSTRALIA
GAUGE DESCRIPTION	Refrigerant Scales	R410a, R22, R404a, R134a	R410a, R22, R404a, R134a	R410a, R22, R407c	R410a
	Gauge Size / Type	3 1/8" (80mm) Class 1.6 Accuracy	3 1/8" (80mm) Class 1.6 Accuracy *Oil-Filled	3 1/8" (80mm) Class 1.6 Accuracy	3 1/8" (80mm) Class 1.6 Accuracy *Oil-Filled
	*Gauges built with Internal Silicon Dampening Cup for Flutter-Free operation				
	Pressure Scales	PSI	PSI	BAR / PSI	PSI / kpa
	Temperature Scales	°F	°F	°C	°F / °C
FITTINGS	Manifold and Hose Fittings	1/4" SAE 45° Fittings	1/4" SAE 45° Fittings	1/4" SAE 45° Fittings	1/4" SAE 45° Fittings
FIVE VALVE	Manifold & Gauges Only	MV5H2D	MV5H3D	MV502D	MV5B3D
REPLACEMENT GAUGES	Low Side Gauge	RGH2LB	RGH3L	RGO2LB	RGB3L
	High Side Gauge	RGH2HB	RGH3H	RGO2HB	RGB3H

RGH2L

RGH2H

VORTECH™ DEEP VACUUM MANIFOLD SERIES

Deep Vacuum series 5 valve anodized aluminum block body with four ¼" SAE ports, one 3/8" SAE vacuum port, Vortech Deep Vacuum Valves, VG200 electronic vacuum gauge, extra large sight glass, oil-filled 3 3/8" (80mm) Class 1.6 accuracy gauges, two hanging hooks and plastic carrying case. MADE IN USA

MV5H3D

RGB3L

RGB3H

RGO2L

RGO2H

PRO-SET® 3 1/8' / 80mm PREMIUM PRESSURE GAUGES

ITEM SPECIFICATIONS		NORTH AMERICA	NORTH AMERICA	SOUTH AMERICA	SOUTH AMERICA AUSTRALIA
GAUGE DESCRIPTION	Refrigerant Scales	R410a, R22, R404a, R134a	R410a, R22, R404a, R134a	R410a, R22, R407c	R410a
	Gauge Size / Type	3 1/8" (80mm) Class 1.6 Accuracy	3 1/8" (80mm) Class 1.6 Accuracy *Oil-Filled	3 1/8" (80mm) Class 1.6 Accuracy	3 1/8" (80mm) Class 1.6 Accuracy *Oil-Filled
	* Gauges built with Internal Silicon Dampening Cup				
	Pressure Scales	PSI	PSI	BAR / PSI	PSI / kpa
	Temperature Scales	°F	°F	°C	°F / °C
GAUGE ONLY	Low Side Gauge	RGH2L	RGH3L	RGO2L	RGB3L
	High Side Gauge	RGH2H	RGH3H	RGO2H	RGB3H
RUBBER BOOT	Low Side Gauge	RGX80BB	NA	RGX80BB	NA
	High Side Gauge	RGX80RB	NA	RGX80RB	NA

BALL VALVE SERIES

1/4 TURN, FULL OPEN/CLOSE VALVES

MANIFOLDS & GAUGES

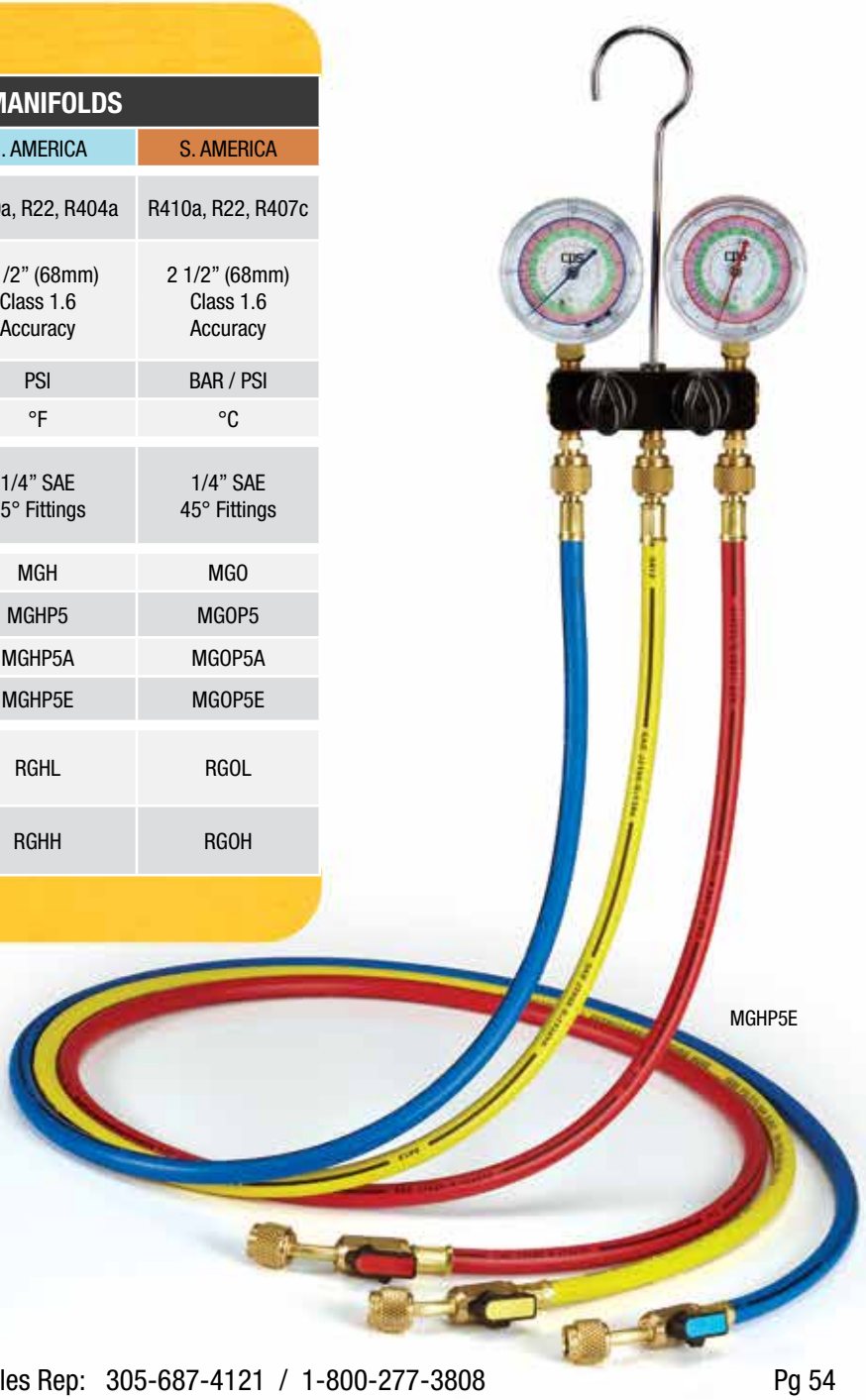
MGH

MGO

BALL VALVE BODY MANIFOLD SERIES

Ball Valve series 2 valve anodized aluminum block body with ¼" SAE fittings, full flow ball valve design, 2 ½" (68mm) Class 1.6 accuracy gauges, and hanging hook.
MADE IN USA

VORTECH™ DEEP VACUUM VALVE MANIFOLDS			
SPECIFICATIONS		N. AMERICA	S. AMERICA
GAUGE DESCRIPTION	Refrigerant Scales	R410a, R22, R404a	R410a, R22, R407c
	Gauge Size / Type	2 1/2" (68mm) Class 1.6 Accuracy	2 1/2" (68mm) Class 1.6 Accuracy
	* Gauges built with Internal Silicon Dampening Cup for Flutter-Free operation		
	Pressure Scales	PSI	BAR / PSI
	Temperature Scales	°F	°C
FITTINGS	Manifold and Hose Fittings	1/4" SAE 45° Fittings	1/4" SAE 45° Fittings
TWO VALVE MANIFOLDS	Manifold & Gauges Only	MGH	MGO
	3 Premium 5ft (150cm) Premium Barrier Hoses	MGHP5	MGOP5
	3 Premium 5ft (150cm) Premium Barrier AB Hoses	MGHP5A	MGOP5A
	3 Premium 5ft (150cm) Premium Barrier BV Hoses	MGHP5E	MGOP5E
REPLACEMENT GAUGES	Low Side Gauge	RGHL	RGOL
	High Side Gauge	RGHH	RGOH



MGHP5E

BRASS BODY SERIES

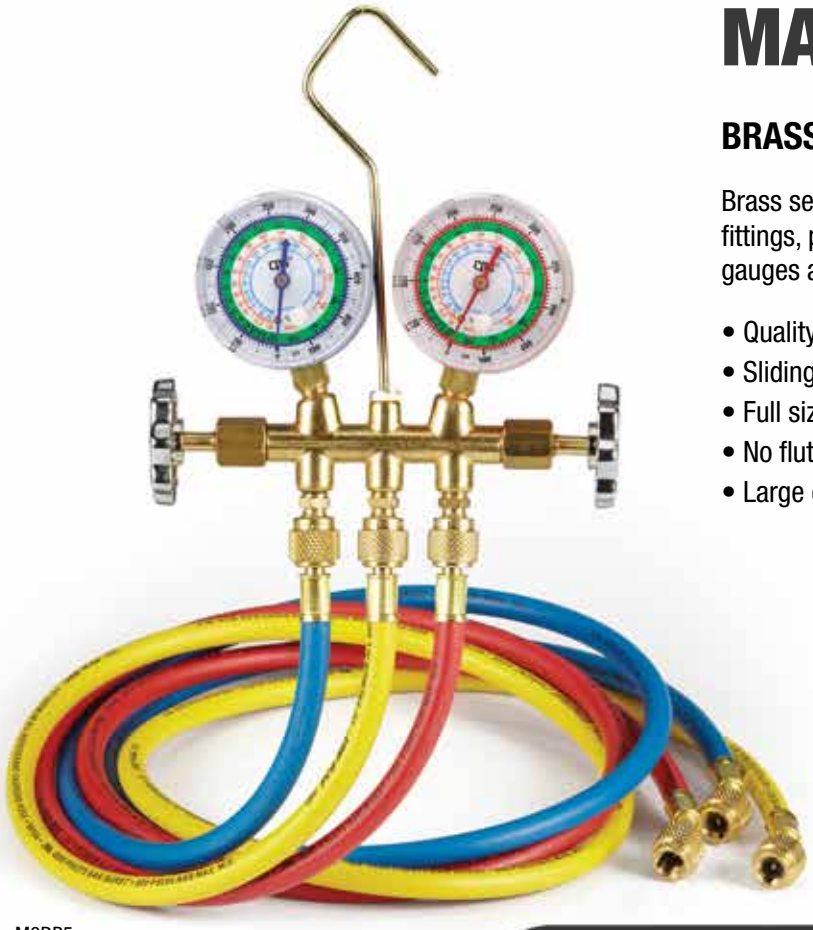
THE ORIGINAL MANIFOLD DESIGN

MANIFOLDS & GAUGES

BRASS BODY MANIFOLD SERIES

Brass series 2 valve forged brass body with ¼" SAE 45° fittings, piston valves, 2 ½" (68mm) Class 1.6 accuracy gauges and hanging hook.

- Quality forged brass body
- Sliding double o-ring piston valve system
- Full sized porting for maximum flow
- No flutter gauges with rugged Metal housings
- Large easy-to-grip knobs



M6DP5

PREMIUM BRASS BODY 2 VALVE MANIFOLDS

	SPECIFICATIONS	N. AMERICA	S. AMERICA
GAUGE DESCRIPTION	Refrigerant Scales	R134a, R22, R404a	R12, R22, R134a
	Gauge Size / Type	2 1/2" (68mm) Class 1.6 Accuracy	2 1/2" (68mm) Class 1.6 Accuracy
	* Gauges built with Internal Silicon Dampening Cup for Flutter-Free operation		
	Pressure Scales	PSI	PSI / kPa
	Temperature Scales	°F	°F / °C
FITTINGS	Manifold and Hose Fittings	1/4" SAE 45° Fittings	1/4" SAE 45° Fittings
TWO VALVE MANIFOLDS	Manifold & Gauges Only	M6D	M6Z
	3 Premium 3ft (150cm) Pro-Set Hoses	M6DP3	M6ZP3
	3 Premium 5ft (150cm) Pro-Set Hoses	M6DP5	M6ZP5
REPLACEMENT GAUGES	Low Side Gauge	RGDL	RGZL
	High Side Gauge	RGDH	RGZH

MANIFOLDS & GAUGES

MANIFOLD & GAUGE ACCESSORIES

A complete line of repair kits, parts and accessories to keep your manifold tuned up and in top shape!

MX2C

MXMH

MXPV

M2XHA

MXC

MANIFOLD & GAUGE ACCESSORIES

ITEM	DESCRIPTION
M2XHA	2-way hose anchor bracket for Vortech & diaphragm
M2XRK	Diaphragm valve repair kit: sevices 2 valves
M4XHA	4-way hose anchor bracket for Vortech & diaphragm
M4XRK	Diaphragm valve repair kit: sevices 4 valves
M5XRK	Diaphragm valve repair kit: sevices 5 valves
MV2XRK	Vortech valve repair kit: services 2 valves
MV4XRK	Vortech valve repair kit: services 4 valves
MV5XRK	Vortech valve repair kit: services 5 valves
MVXK	Replacement valve handle w/ plugs for Vortech manifolds
MXBK	Replacement valve handle for brass manifold
MXC	Plastic carrying case for manifolds
MX2C	Rugged canvas carrying case for manifolds
MXK	Replacement valve handle w/ labels for diaphragm manifolds
MXMH	Hanging hook for all manifolds
MXPK	Replacement valve handle w/ labels for BLACKMAX manifolds
MXPV	Complete BLACKMAX piston valve assembly
MXPVO	BLACKMAX piston valve seals repair kit: services 2 valves

MVXK

M2XRK

MVXKC

MXPK

MXK

MXPVO

GT1

GT2

GT4

GAS PRESSURE TEST ASSEMBLIES

The GT1 and GT2 are designed to test the integrity of new installations for pressure leaks. Available with either a 3/4" or 1" FPT brass bell. Simply connect the test assembly, pressurize the system using the supplied access port and monitor the easy-to-read 3 1/2" / 80mm gauge for potential pressure drops that would indicate a leak.

GT1 GAS TEST GAUGE

- Large 3 1/8" gauge - easy to read
- 0-30 PSIG (0-2 BAR) pressure scale
- 1 PSIG increments
- 3/4" FPT hex style brass bell
- Access valve

GT2 GAS TEST GAUGE

- Large 3 1/8" gauge - easy to read
- 0-30 PSIG (0-2 BAR) pressure scale
- 1 PSIG increments
- 3/4" FPT hex style brass bell
- Access valve

GT3 FUEL OIL TEST KIT

The GT3 is a comprehensive test kit which includes the components necessary to test oil fuel pump performance while diagnosing related burner efficiency issues such as cleaner light-offs and coasting stops.

INCLUDES:

- 2 1/2" gauge, scale 30", 0-150 lbs
- 2 1/2" gauge, scale 30", 0-300 lbs
- 12" hose 1/4" Fem swivel x 1/4" Fem 45° swivel
- 1/8 NPT x 1/4 Male SAE adapter
- 1/8 NPT x 1/4 Male SAE 90° adapter
- 1/4 NPT x 1/4 Male SAE adapter
- 1/4 NPT x 1/4 Male SAE 90° adapter
- Carrying Case

GT3

VACUUM / CHARGING HOSES

OUR OFFERING IS AS FLEXIBLE AS OUR HOSES

VACUUM / CHARGING HOSES

HP3E

PRO-SET® PREMIUM BARRIER CHARGING HOSES

- R-410A Compatible
- 800 psi working pressure; 4000 psi burst
- Environment friendly Nylon Permeation Barrier meets SAE J2196
- Compatible with CFC, HCFC and HFC refrigerants & blends
- Available with MicroSeal or ball valve fittings

HP3

HP3A

HP3L

HJ3

HTE

PREMIUM CHARGING HOSES					
LENGTH		YELLOW	BLUE	RED	3-PACK
1/4" Premium Hoses For All Refrigerants					
3' - 90cm		HP3Y	HP3B	HP3R	HP3
5' - 150cm		HP5Y	HP5B	HP5R	HP5
6' - 180cm		HP6Y	HP6B	HP6R	HP6
1/4" Premium Hoses With 45° Ball Valve On End					
3' - 90cm		HP3YE	HP3BE	HP3RE	HP3E
5' - 150cm		HP5YE	HP5BE	HP5RE	HP5E
6' - 180cm		HP6YE	HP6BE	HP6RE	HP6E
1/4" Premium Hoses With MICROSEAL™ Anti-Blowback Valve On One End					
3' - 90cm		HP3YA	HP3BA	HP3RA	HP3A
5' - 150cm		HP5YA	HP5BA	HP5RA	HP5A
6' - 180cm		HP6YA	HP6BA	HP6RA	HP6A
1/4" Premium In-Line Ball Valve Hoses					
3' - 90cm		HP3YL	HP3BL	HP3RL	HP3L
5' - 150cm		HP5YL	HP5BL	HP5RL	HP5L
6' - 180cm		HP6YL	HP6BL	HP6RL	HP6L
R-410A Premium Hose w/ Special 1/2"-20 UNF Fittings					
3' - 90cm		HJ3Y	HJ3B	HJ3R	HJ3
5' - 150cm		HJ5Y	HJ5B	HJ5R	HJ5
WITH 45° BALL VALVE FITTING IN ONE END					
3' - 90cm		HJ3YE	HJ3BE	HJ3RE	HJ3E
5' - 150cm		HJ5YE	HJ5BE	HJ5RE	HJ5E
6" - 12" Ball Valve Hose Extensions					
6"	1/4 SAE	HTYE	HTBE	HTRE	HTE
12"	1/4 SAE	HT1YE	HT1BE	HT1RE	HT1E
6"	1/2-20 UNF	HT410YEJ	HT410BEJ	HT410REJ	HT410EJ

VACUUM / CHARGING HOSES

STANDARD CHARGING HOSES

- All-weather flexibility and strength
- Extra deep knurling on nuts for easy grip
- 750 psi working pressure; 3000 psi burst
- 1/4" SAE fittings with 45° bend on one end
- Available with MicroSeal™ or ball valve fittings
- Leak-proof eight-sided crimp
- Blow-off grooves channel refrigerant to prevent spray back

Integral adjustable valve core depressor can open all types of Schraeder valves.

HS3

HS3E

HS3A

HS3L

STANDARD HOSE CONFIGURATIONS

STANDARD CHARGING HOSES				
LENGTH	YELLOW	BLUE	RED	3-PACK
1/4" Standard Hoses				
3' - 90cm	HS3Y	HS3B	HS3R	HS3
4' - 120cm	HS4Y	HS4B	HS4R	HS4
5' - 150cm	HS5Y	HS5B	HS5R	HS5
6' - 180cm	HS6Y	HS6B	HS6R	HS6
8' - 240cm	HS8Y	HS8B	HS8R	HS8
10' - 300cm	HS10Y	HS10B	HS10R	HS10
1/4" Standard Hoses With 45° Ball Valve On End				
3' - 90cm	HS3YE	HS3BE	HS3RE	HS3E
5' - 150cm	HS5YE	HS5BE	HS5RE	HS5E
6' - 180cm	HS6YE	HS6BE	HS6RE	HS6E
8' - 240cm	HS8YE	HS8BE	HS8RE	HS8E
1/4" Standard Hoses With MICROSEAL™ Anti-Blowback Valve On One End				
3' - 90cm	HS3YA	HS3BA	HS3RA	HS3A
5' - 150cm	HS5YA	HS5BA	HS5RA	HS5A
6' - 180cm	HS6YA	HS6BA	HS6RA	HS6A
8' - 240cm	HS8YA	HS8BA	HS8RA	HS8A
1/4" Standard In-Line Ball Valve Hoses				
3' - 90cm	HS3YL	HS3BL	HS3RL	HS3L
5' - 150cm	HS5YL	HS5BL	HS5RL	HS5L
6' - 180cm	HS6YL	HS6BL	HS6RL	HS6L
8' - 240cm	HS8YL	HS8BL	HS8RL	HS8L

PREMIUM 3/8” VACUUM / CHARGING HOSES

- 5/16” I.D. heavy-duty hose
- Permeation resistant barrier
- 460 psi working pressure; 2300 psi burst

HV3

PREMIUM PRESSURE CONTROL HOSES

- Replaces Standard Copper Capillary Tubing
- 1/4” SAE Hex Style Fittings

HHC2S

ITEM	PARTS DESCRIPTION
HXGD2	1/2”-20 UNF &1/2” ACME Hose Gaskets
HX3G	3/16” Hose Gasket (10)
HX14R	14mm Hose Rings (10)
HX38G	3/8” Hose Gaskets (10)
HXG2	1/2” UNF &1/2” ACME Hose Gaskets (10),core depressors (10)
HXGA	Microseal Antiblowback gaskets (10)
HXGA410	1/2”-20 UNF Microseal Antiblowback gaskets (10)
HXTG	1/4” SAE Teflon hose gasket (10)
HXTG2	1/2”-20 UNF & 1/2” ACME Teflon hose gasket (10)

REPLACEMENT HOSE GASKETS, DEPRESSORS & O-RINGS

HX14R

HXTG2

HXGD2

HXG2

Premium Pressure Control Hoses		
LENGTH	90° x 90°	Straight x 90°
2’ - 60cm	HHC2	HHC2S
3’ - 90cm	HHC3	HHC3S
4’ - 120cm	HHC4	HHC4S

Premium 3/8” Vacuum/Charging Hoses	
HOSE P/N	LENGTH
WITHOUT BALL VALVE	
HV3	3’ - 90cm
HV5	5’ - 150cm
HV6	6’ - 180cm
HV8	8’ - 240cm
WITH IN-LINE BALL VALVE	
HV5E	5’ - 150cm

CHARGING HOSE VALVES

PRECISION MACHINED, SOLID BRASS

CHARGING HOSE VALVES

BV

BV45

BV90

BVM

AB12 ABG18

AB3

PREMIUM PRO-SET® BALL VALVES

- Add to existing hose to eliminate refrigerant loss and comply with EPA regulations
- Easy 1/4 turn open/close with rugged plastic composite color-coded handles
- Oversized chrome ball for smooth operation and non-restrictive flow
- Individual valves include all three color-coded handle inserts

PRO-SET® BALL VALVE SPECIFICATIONS

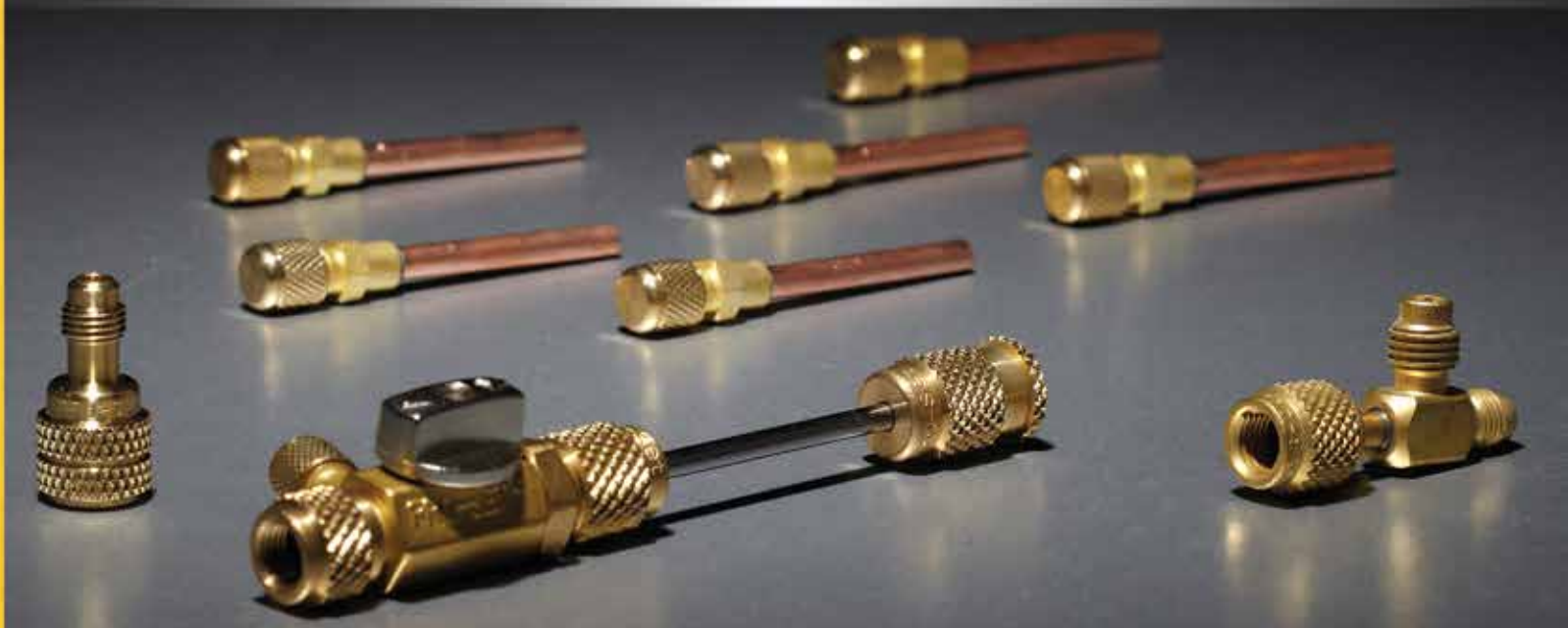
ITEM	QTY / PK	FEMALE	MALE	OTHER
BV	1	1/4" SAE	1/4" SAE	Straight
BV3	3	1/4" SAE	1/4" SAE	Straight
BV38	1	3/8" SAE	3/8" SAE	Straight
BV410	1	1/2" - 20 UNF	1/2" - 20 UNF	Straight
BV41018	1		1/2" 20 UNF x 1/8" MNPT	Straight
BV4103	3	1/2" - 20 UNF	1/2" - 20 UNF	Straight
BV41090A	1	1/2" - 20 UNF 90°	1/4" SAE	90° FM
BV410A	1	1/2" - 20 UNF	1/4" SAE	Straight
BV45	1	1/4" SAE 45°	1/4" SAE	45° FM
BV453	3	1/4" SAE 45°	1/4" SAE	45° FM
BV90	1	1/4" SAE 90°	1/4" SAE	90° FM
BV903	3	1/4" SAE 90°	1/4" SAE	90° FM
BVAD38	1	3/8" SAE	1/4" SAE	Straight
BVBH	1		1/4" SAE x 1/16" MNPT	Bulkhead
BVM	1		1/4" SAE x 1/4" SAE	Straight
BVM3	3		1/4" SAE x 1/4" SAE	Straight
BVXH	3	Replacement Ball Valve Handle w/1 ea (Yellow, Blue, Red) inserts		

MICROSEAL™ ANTI-BLOWBACK VALVE SPECIFICATIONS

AB	1	1/4" SAE	1/4" SAE	Straight
AB12	1	1/2" ACME	1/2" ACME	Straight
AB3	3	1/4" SAE	1/4" SAE	Straight
AB410	1	1/2" - 20 UNF	1/2" - 20 UNF	Straight
AB4103	3	1/2" - 20 UNF	1/2" - 20 UNF	Straight
AB41090A	1	1/2" - 20 UNF	1/4" SAE	90° FM
AB410A	1	1/2" - 20 UNF	1/4" SAE	Straight
AB90	1	1/4" SAE 90°	1/4" SAE	90° FM
AB903	3	1/4" SAE 90°	1/4" SAE	90° FM
ABG18	1	1/4" SAE x 1/8"FNPT		1/8" FNPT is not an AB

BRASS ADAPTERS, FITTINGS & VALVE CORE TOOLS

MANUFACTURED TO STRINGENT INDUSTRY STANDARDS



BRASS ADAPTERS

ITEM	QTY / PK	FEMALE	MALE	OTHER	APPLICATION
AD12	1	1/2" ACME	LO-side R-134a	-	R-134a automotive tanks
AD12B	100	1/2" ACME	LO-side R-134a	Bulk	R-134a automotive tanks
AD14	1	-	14mm x 1/4" SAE	-	R-134a automotive couplers
AD14B	100	-	14mm x 1/4" SAE	Bulk	R-134a automotive couplers
AD18C	1	1/4" SAE	1/8" SAE	w/ valve core	Manifolds, Compressors
AD24	6	-	1/4" SAE x 1/8" MNPT	w/ valve core	Manifolds, Compressors
AD24B	100	-	1/4" SAE x 1/8" MNPT	Bulk	1/4” Service Manifolds
AD36	1	3/16" SAE	1/4" SAE	no valve core	TLVC Valve Core Tool for R-12 Auto. HI-side
AD36C	1	3/16" SAE	1/4" SAE	w/ valve core	Automotive Adapter
AD41	1	3/4" -14	1/4" SAE	w/ gasket	Large 125 lb cylinders
AD41B	100	3/4" -14	1/4" SAE	Bulk	Large 125 lb cylinders
AD61	1	3/4" -14	3/8" SAE	w/ gasket	Large 125 lb cylinders
AD61B	100	3/4" -14	3/8" SAE	Bulk	Large 125 lb cylinders
AD44	6	-	1/4" SAE x 1/4" MNPT	w/ valve core & cap	Vacuum Pumps, Compressors
AD44B	100	-	1/4" SAE x 1/4" MNPT	Bulk	Vacuum Pumps, Compressors
AD47	1	-	1/4" SAE X 1/4" SAE	-	1/4” Hose Union
AD47B	100	-	1/4" SAE X 1/4" SAE	Bulk	1/4” Hose Union
AD48	3	1/4" SAE	1/2" ACME	w/ valve core	Vacuum Pumps/Manifolds/Recovery/Tanks
AD48B	50	1/4" SAE	1/2" ACME	w/ valve core	Vacuum Pumps/Manifolds/Recovery/Tanks
AD48C	300	1/4" SAE	1/2" ACME	no valve core	Vacuum Pumps/Manifolds/Recovery/Tanks
AD68	3	1/4" SAE	3/8" SAE	w/core & Depressor	Vacuum Pumps
AD68V	1	1/2" ACME	3/8" SAE	w/core & Depressor Bulk	Vacuum Pumps
AD78	1	1/4" SAE	1/2"-20 UNF	w/ valve core	R-410A International
AD78B	100	1/4" SAE	1/2"-20 UNF	Bulk	R-410A International
AD81	1	3/4" -14	1/2" ACME	w/ gasket	Large 125 lb cylinder
AD81B	100	3/4" -14	1/2" ACME	Bulk	Large 125 lb cylinder
AD84	3	1/2" ACME	1/4" SAE	no valve core	Vacuum Pumps/Manifolds/Recovery/Tanks
AD84B	100	1/2" ACME	1/4" SAE	Bulk	Vacuum Pumps/Manifolds/Recovery/Tanks
AD84C	3	1/2" ACME	1/4" SAE	w/ valve core	Vacuum Pumps/Manifolds/Recovery/Tanks
AD84CB	100	1/2” ACME	1/4” SAE	Bulk	Vacuum Pumps/Manifolds/Recovery/Tanks
AD87	1	1/2"-20 UNF	1/4" SAE	w/ valve core	R-410A International
AD87S	1	1/2"-20 UNF SWVL	1/4" SAE 55D	w/ valve core	R-410A International
AD149C	1	1/4" SAE	1/4" SAE 90D	w/ valve core	Automotive Adapter
AD369C	1	3/16" SAE	1/4" SAE 90D	w/ valve core	Automotive Adapter
AD849C	3	1/2" ACME 90°	1/4" SAE 90D	w/ valve core	Automotive Adapter
AD51B	100	5/8 BPS	1/4” SAE	Bulk	Large Cylinder Adapter
AD64	1	1/4” SAE	3/8” SAE	adapter	-
AD91	1	21.8 Whitworth	3/8” SAE	w/ gasket	Large Cylinder Adapter
AD91B	100	21.8 Whitworth	1/4” SAE	Bulk	Large Cylinder Adapter
AD91C	1	21.8 Whitworth	-	Cap w/ Gasket	-
AD91CB	100	21.8 Whitworth	-	Bulk	-

ADAPTERS / FITTINGS & VALVE CORE TOOLS

RING CAP & VALVE CORE SPECIFICATIONS

QUICK SEAL O-RING CAPS & VALVE CORES

ITEM	QTY / PK	DESCRIPTION
AVC134C	2	1/2" ACME Brass Caps w/Chain
AVC134CB	100	1/2" ACME Brass Caps w/Chain (BULK)
AVC134H	10	R-134a HI Side Caps
AVC134HB	100	R-134a HI Side Caps
AVC134L	10	R-134a LO Side Caps
AVC134LB	100	R-134a LO Side Caps
AVC134PS	2	1/2" ACME Plastic Cap w/ Straps
AVC134PSB	100	1/2" ACME Plastic Cap w/ Straps
AVC2	10	1/4" Aluminum Term Caps
AVC3	10	3/16" Aluminum Term Caps
AVC3P	10	3/16" Plastic Caps
AVC3PB	10	3/16" Plastic Caps
AVC410	10	1/2"-20 UNF SAE Brass Caps
AVC410B	100	1/2"-20 UNF SAE Brass Caps
AVC410C	2	1/2" -20 UNF SAE Brass Caps w/ Chain
AVC410CB	100	1/2" -20 UNF SAE Brass Caps w/ Chain (BULK)
AVC4	10	1/4" SAE Brass Caps
AVC425	25	1/4" SAE Brass Caps
AVC4B	100	1/4" SAE Brass Caps Bulk
AVC4C	2	1/4" SAE Brass Caps w/ Chain
AVC4CB	100	1/4" SAE Brass Caps w/ Chain (BULK)
AVC4P	6	1/4" SAE Plastic Caps
AVC4PB	100	1/4" SAE Plastic Caps
AVC6C	2	3/8" SAE Brass Caps w/ Chain
AVC6CB	100	3/8" SAE Brass Caps w/ Chain (BULK)
AVC8C	2	1/2" SAE Brass Caps w/ Chain
AVC8BC	100	1/2" SAE Brass Caps w/ Chain (BULK)
AVC4PS	6	1/4" SAE Plastic Caps w/ Straps
AVC4R	6	1/4" SAE Brass Caps w/ Core Remover
AVC4RB	100	1/4" SAE Brass Caps w/ Core Remover Bulk
AVC6P	3	3/8" SAE Plastic Caps
AVLP	1	Univ. Line Tap Valve 3/16" - 3/8" O.D.
AVS1	10	Valve Cores
AVS125	25	Valve Cores
AVS1B	100	Valve Cores Bulk
AVS1BC	1000	Valve Cores Bulk
AVS2	10	GM Large Bore Valve Core
AVS3	10vv	JRA 6mm Valve Cores

AVC4

AVC4R

AVS1

AVC8C AVC6C AVC134C AVC4C AVC410C

VALVE CORE TOOL ACCESSORIES

ITEM	DESCRIPTION
TLVC	1/4" SAE Remover & Installer
TLVCS	1/4" SAE valve core remover & installer w/side port
TLVC1	Standard Valve Core w/3 cores
TLVC2	Dual Valve Core Standard & Large Bore Remover/Installer
TLVC2B	Dual valve core tool (Bulk 100pk)
TLVC4	Valve Core Remover/Installer with Port Rethreader
TLVC6	JRA 6mm Valve Core Remover/Installer
TLVC134	R-134a Valve Core Remover & Installer
TLVC410	1/2"-20 UNF Remover/Installer
TLVCS410	1/2"-20 UNF Valve Core Remover/Installer w/side port
TLVC810	EATON 8 & 10mm Valve Core Remover/Installer
TLXVCBC	Broken Schrader Extractor Tool for TLVC/TLVCS
TLXVCRT	Schrader Rethreading Tool for TLVC/TLVCS
TLXVCT	Digital Thermometer Accessory for TLVC/TLVCS
TLXVC410BC	Broken Schrader Extractor Tool for TLVC410/TLVCS410
TLXVC410RT	Schrader Rethreading Tool for TLVC410/TLVCS410

TLVC

TLXVCT

TLXVCBC

AVB34 - 6PK
AVB34B - 100PK
3/16" ID x 1/4" OD

AVB346 - 6PK
AVB346B - 100PK
AVB346BU - 100PK unassbld
AVB346RB - 100PK cap w/core tool
3/16" ID x 1/4" OD x 3/8" OD

AVB46 - 6PK
AVB46B - 100PK
1/4" ID x 3/8" OD

AVB456 - 6PK
AVB456B - 100PK
1/8" ID x 3/16", 1/4", 5/16"

AVB6 - 6PK
AVB6B - 100PK
AVB6BC -100PK w/o caps
6-8-10mm OD Solder

HVAC/R ACCESS FITTINGS

STANDARD CAP		DESCRIPTION	WRENCH CAP	
6pk	100pk		6pk	100pk
AV2	AV2B	1/8" O.D.x 1/16" I.D.	AV2R	AV2RB
AV2P	AV2PB	1/8" MPT x 1/4" I.D.	N/A	N/A
AV3	AV3B	3/16" O.D. x 1/8" I.D.	AV3R	AV3RB
AV4	AV4B	1/4" O.D. x 3/16" I.D.	AV4R	AV4RB
	AV4BU	1/4" O.D. x 3/16" I.D. UNASSMBLD	N/A	N/A
AV4L	AV4LB	1/4" O.D. x 3/16" I.D. W/4" COP-TB EXT	AV4LR	AV4LRB
AV4P	AV4PB	1/4" MPT x 1/4" I.D. SOL	N/A	N/A
AV5	AV5B	5/16" O.D. x 1/4" I.D.	AV5R	AV5RB
AV6	AV6B	3/8" O.D. x 5/16" I.D.	AV6R	AV6RB
AV6MM	AV6MB	6mm O.D. x 5mm I.D.	AV6MR	AV6MRB
AV4410	AV4410B	1/2-20 ACCES,1/4" O.D. X 3/16" I.D.	N/A	N/A
AV46M	AV46MB	6mm O.D. x 1/4" O.D.	N/A	N/A

AVCT10 AVCT8 AVCT4

AVS44

AV2
- Includes Wrench Cap
- Extension length approx. 2"
- For Use with all Refrigerants
- Valves Meet ARI Standard 720-97
- Material is CDA 360 Brass & Standard Refrigeration Tubing

AVT4P AVT2P AVT4M

AVT44 AVT64

1/4"SAE TEE CONNECTORS

ITEM	Qty/Pk	DESCRIPTION
AVT2P	3	1/4" Male w/Cap & Valve Core x 1/4" Male x 1/8" MNPT
AVT4	3	1/4" Male w/Cap & Valve Core x 1/8" MNPT x 1/4" Male
AVT4B	100	1/4" Male w/Cap & Valve Core x 1/8" MNPT x 1/4" Male
AVT4P	3	1/4" Male w/Cap & Valve Core x 1/4" Male x 1/4" MNPT
AVT4M	3	1/4" Male x 1/8" MNPT x 1/4" Male w/Core
AVT44	3	1/4" Female Hex x 1/4" SAE male x 1/4" male w/Cap & Valve Core
AVT45	3	1/4" Male x 1/4" Female Knurl x 1/4" Male
AVT48	1	1/4" Male x 1/4" Female Knurl x 1/2" Acme Male
AVT64	3	1/4" Male w/Cap & Valve Core x 1/4" Male x 1/4" Female Hex
AVT64B	100	1/4" Male w/Cap & Valve Core x 1/4" Malex 1/4" Female Hex
AVT87	1	1/4" Male x 1/2"-20 UNF Female x 1/2"-20 UNF Male (R-410A)

1/4" SAE ACCESS VALVE WITH COPPER TUBE ON BRANCH

ITEM	Qty/Pk	DESCRIPTION
AVCT4	3	1/4" SAE x 1/4" O.D.F
AVCT4B	100	1/4" SAE x 1/4" O.D.F
AVCT5	3	1/4" SAE x 5/16" O.D.F
AVCT6	3	1/4" SAE x 3/8" O.D.F
AVCT8	3	1/4" SAE x 1/2" O.D.F
AVCT10	1	1/4" SAE x 5/8" O.D.F
AVCT12	1	1/4" SAE x 3/4" O.D.F
AVCT14	1	1/4" SAE x 7/8" O.D.F
AVCT18	1	1/4" SAE x 1-1/8" O.D.F

TUBING TOOLS

ERGONOMIC TOOLS FOR CUTTING, FORMING & BENDING

PRO-SET® HEAVY DUTY TITANIUM TUBE CUTTERS

You need tools that work as hard as you do and nothing outperforms like the power of the Pro-Set Titanium HD series. Put them to work for you on your next job.

PERFORMANCE THAT REALLY MAKES THE CUT

KEY FEATURES:

- All cutter wheels are precision machined from high grade chromium steel and plated with Titanium Nitride to increase life up to 5 times longer
- Precision machined rollers feature cut-off groove to reduce tube loss in damaged flare removal
- Durable metal handle with industrial grade rubber boot provides sure comfortable grip
- Integrated retractable and replaceable rotary reamer tool for ease in deburring pipe
- Enclosed hardened steel, thrust bearing feed mechanism for smooth cutting action and trouble free operation
- Available in 5 popular configurations to accommodate cutting of 1/8” (4mm) up to 2 5/8” (66mm) O.D. tubing
- Produces clean right angle cuts every time

Integrated retractable and replaceable reamer tool

TITANIUM TUBE CUTTERS

ITEM	CUTTING RANGE (inches)	CUTTING RANGE (millimeters)
TCPVC	1/4” - 2 5/8”	6 to 68mm
TCT174	1/8” - 1 1/8	3 to 30mm
TCT206	1/4” - 2 5/8”	6 to 68mm
TCT127	1/8” - 5/8”	3 to 16mm
TCT274	1/8” - 1 3/8”	3 to 35mm
TCT312	1/8” - 1 3/4”	3 to 45mm

RATCHETING PVC TUBE CUTTER:

- Ratcheting PVC tube cutter
- Heavy duty all metal construction
- Capacity up to 5/8”
- Cuts CPVC, PVC, plastic & rubber tubing

TUBING TOOLS

TC206

Premium ratchet feed tube cutter

Capacity: 3/8” to 2-5/8” O.D.

* Ratchet feed mechanism speeds up cutting operation.

TC312

Heavy duty tube cutter

Capacity: 1/4” to 1-5/8”
(7mm to 41mm)

* Spare Cutting Wheel Located under retractable locking reamer.

TC174

Big mini tube cutter

Capacity: 3/8” to 1-1/8”
(9.5mm to 28mm)

* Wide Flare Cut-off Groove to accommodate flares on large size tubing.

TC127

Mini tube cutter

Capacity: 1/8” to 5/8”
(4mm to 15mm)

TC274

Premium tube cutter

Capacity: 1/8” to 1-1/8”
(4mm to 28mm)

PRO-SET® TUBE CUTTER SPECIFICATIONS

ITEM	DESCRIPTION
TC174	Big Mini Tube Cutter 3/8" - 1 1/8", 9.5 - 28 mm
TCX7C	TC127 Cutting Wheel- (10 PK)
TCX7S	TC127 Cutting Wheel Screw- (10 PK)
TC312	Heavy Duty Tube Cutter 1/4" to 1 5/8", 7 to 41 mm
TCX4C	TC274 / 312 Cutting Wheel- (10 PK)
TCX4R	TC274 / TC312 Reamer Blade
TCX4RS	TC274 / TC312 Reamer Blade Screw
TCX4S	TC274 / TC312 Cutting Wheel Screw- (10 PK)
TCSET	TC127 / TC274 Tubing Cutter Set
TC100	Tube Cutter - 1/4" - 7/8". 6 - 23mm
TCX4CS	Cutting Wheel and Screw for TC274 / TC312
TCX7CS	Cutting Wheel and Screw for TC127
TCX100CS	Cutting Wheel and Screw for TC100
TCX4CTS	Titanium Cutting Wheel and Screw for TCTC174/274/312
TCX6CTS	Titanium Cutting Wheel and Screw for TC206
TCX7CTS	Titanium Cutting Wheel and Screw for TC127

TCX4S

TCX4R

TCX4C

TB250

TB12MM

TB05

TB16MM

PRO-SET® TUBE BENDERS

You need tools that work as hard as you do and nothing outperforms like the power of the Pro-Set Tube Bender series. Put them to work for you on your next job.

TB250
Universal ratchet tube bender for soft copper, aluminum, and light wall hydraulic tubing from 3/8” to 7/8”

Sizes: 1/4”, 3/8”, 1/2”, 5/8”, 3/4”, 7/8”
(6, 8,10, 12, 16, 19, 22mm)

ITEM	DESCRIPTION
TB04	1/4" Tube Bender
TB05	5/16" - 8 mm Tube Bender
TB06	3/8" Tube Bender
TB08	1/2" Tube Bender
TB10	3/4" Tube Bender
TB12	5/8" Tube Bender
TB14	7/8" Tube Bender
TB250	Universal Tube Bender, TC274, Reamer
TB368	Universal Tube Bender 1/4"-5/16"-3/8" 6-8-10 mm
TB6MM	6 mm Tube Bender
TB10MM	10 mm Tube Bender
TB12MM	12 mm Tube Bender
TB15MM	15 mm Tube Bender
TB16MM	16 mm Tube Bender
TB10XH	Replacement Hook with Screw
TB12XH	TB12 Replacement Hook with Screw
TBXB1	Small Bending Bar
TBX2	Large Bending Bar
TBXM10	Mandrel 3/8" / 10MM
TBXM14	Mandrel 1/2" / 14MM
TBXM16	Mandrel 5/8" / 16MM
TBXM19	Mandrel 3/4" / 19MM
TBXM22	Mandrel 7/8" / 22MM
TBXM6	Mandrel 1/4" / 6MM
TBXM8	Mandrel 5/16" / 8MM
TBXR	Ratchet Mechanism

PRO-SET® FLARING & SWAGING TOOLS

Effeciently connect gas pipes and copper tubing with premium Pro-Set branded flaring and swaging tools.

PRO-SET® FLARING TOOLS, KITS, REPLACEMENT PART SPECIFICATIONS

ITEM	DESCRIPTION
FS226	Tube Cutting/Double Flaring Set 1/8" - 3/4"
FS226M	Metric Tube Cutting/Double Flaring Set 4.75, 6, 8, 10mm
FS275	45° Flaring & Swaging Kit 1/8" - 3/4"
FS275M	45° Flaring & Swaging Kit Metric
FSX501	FS275 Bar 7/16", 1/4", 1/8", 3/16", 5/16", 3/8"
FSX502	FS275 Short Bar 1/2", 5/8", 3/4" O.D
FSX503	FS275 5/16" Swaging Adapter
FSX504	FS275 3/16" Swaging Adapter
FSX505	FS275 1/2" Swaging Adapter
FSX506	FS275 5/8" Swaging Adapter
FSX507	FS275M 8, 12, 14, 16, 22 MM Swaging Adapter
FSX508	FS275 3/4" Swaging Adapter
FSX509	FS275 Yoke Assembly
FSX511	FS275M 15, 16mm Flaring Bar Metric
FSX512	FS275M 4, 18, 22mm Flaring Bar Metric
FSX513	FS275 Compressor Cone
FT195	45° Flaring Tool 3/16" to 5/8"
FT500	45° Flaring/Burning Tool Metric 3/16" TO 5/8"
FT500M	45°Flaring/Burning Tool Metric 6mm to 16mm
FT525	Adjustable Flaring Tool 3/16" to 5/8"/ 5 to 16mm
FT800FN	R-410A Imperial Concentric Flaring Tool w/Ratchet 3/16",1/4", 5/16" 3/8", 1/2", 5/8", 3/4"
FT806A	Imperial Eccentric Flaring Tool w/Ratchet 3/16",1/4", 5/16", 3/8", 1/2", 5/8", 3/4"
FT806M	Metric Eccentric Flaring Tool w/Ratchet 6, 8, 10, 12, 15, 16, 18mm
FTX500	FT195 Yoke Assembly
FTX501	FT195 Flaring Bar 5/16", 3/8", 7/16"
FTX509	FT195 Compressor Cone
FTX510	FT195 Wing Nut
FTX513	FT500 Yoke Assembly
FTX514	FT500 Die Holder Assembly
FTX515	FT500M Die Holder Assembly
FTX516	FT525 Yoke Assembly
FTX517	FT525 Tube Holding Assembly
FTX518	FS275 Yoke Assembly
FTX800B410	FT800FN R410A Imperial Flaring Bar
FTX800BA	FT806A Imperial Flaring Bar
FTX800BM	FT806M Metric Flaring Bar
FTX800R	Ratchet for FT800FN/FT806A/FT806M
FTX800Y	Yoke Assembly FT800FN/FT806A/FT806M

FT800FN

- Engineered specifically to create stronger flare joints for higher pressure R-410A systems.
- Unique clutch driven feed screw and eccentrically mounted cone produces uniform, clean flare walls without galling.
- Exclusive 3/8”sq drive incorporated directly in yoke handle for use with ratchet (included).
- Rugged polyethylene storage case included.

FT525
Universal/Adjustable Flaring Tool
3/16” to 5/8”
(5mm to 16mm)

FT195
45° Flaring Tool
3/16” to 5/8”

FT203
Flaring Tool
5/8”, 3/4”, 7/8”, & 1 1/8” O.D

FEATURES OF THE FT500

- Slot in yoke is used for tube height gauge.
- Sliding dies with lever clamping action.
- Yoke slips over top of bar, then locks into position with slight turn.

FS275
45° Flaring
& Swaging Kit
1/8” - 3/4”

*All flaring tools listed are recommended for softer thin-walled materials such as copper, aluminum, and brass

TLE6/TLE6M (metric)

PRO-SET® TUBE EXPANDER / SWAGING SET

TLE6/TLE6M (metric)

- Create professional grade one seam pipe unions in the field.
- Multi-faceted interchangeable heads ensure equal linear expansion of tubing and uniformed wall thickness.
- Extended handle length provides added leverage for ease of operation.
- Re-round deformed tubing and fabricate couplings.
- Components are heat treated for durability.
- Ideal for copper, aluminum and soft steel tubing.
- Includes storage case for long-term protection.
- Components are heat treated for durability.
- Ideal for copper, aluminum and soft steel tubing.
- Includes storage case for long-term protection.

PRO-SET® METRIC TORQUE WRENCH SET

Professional interchangeable jaw torque wrench set ensures compliance with OEM torque settings for high pressure systems.

- Interchangeable 17, 22, 24, 26, 27 & 29mm jaw sizes.
- Corresponding settings clearly marked on torque wrench in Newton Meters (10-75Nm).
- Provides consistently accurate readings and rugged, trouble free performance.
- Includes storage case for long-term protection.

TLTWSM

DEBURRING TOOLS /UNIVERSAL REAMER TOOL

TLRM
Pocket Deburring Tool

TLDB2
Pocket Deburring Tool

ITEM	DESCRIPTION
TLE6	Tube expander set with 6 heads 3/8", 1/2", 5/8", 3/4", 7/8", 1 1/8"
TLE6M	Tube expander set with case includes: 10, 12, 15, 18, 22, 28mm
TLE601	Expander tool only
TLH06	3/8" Expander Head (Standard in TLE6)
TLH08	1/2" Expander Head (Standard in TLE6)
TLH10	5/8" Expander Head (Standard in TLE6)
TLH12	3/4" Expander Head (Standard in TLE6)
TLH14	7/8" Expander Head (Standard in TLE6)
TLH16	1" Expander Head
TLH18	1 1/8" Expander Head (Standard in TLE6)
TLH22	1 3/8" Expander Head
TLH26	1 5/8" Expander Head
TLHM10	10mm Expander Head (Standard in TLE6M)
TLHM12	12mm Expander Head (Standard in TLE6M)
TLHM15	15mm Expander Head (Standard in TLE6M)
TLHM16	16mm Expander Head
TLHM18	18mm Expander Head (Standard in TLE6M)
TLHM20	20mm Expander Head
TLHM22	22mm Expander Head (Standard in TLE6M)
TLHM28	28mm Expander Head (Standard in TLE6M)
TLHM35	35mm Expander Head
TLHM42	42mm Expander Head

TUBING TOOLS

BLACKMAX® PREMIUM TUBING TOOLS

Introducing BlackMAX hand tools- a new line of premium grade, good-looking and hard-working hand tools from CPS. For cutting, deburing, flaring, expanding and bending soft copper and aluminum tubing. BlackMAX hand tools also include a line of 2 and 3 jaw gear pullers. Premium form, function and ergonomics at affordable prices. Try them today and see the difference!

BTC200

BTC300

Patented “Set and Cut” technology provides easy tube cutting with little or no readjustment required.

Quick release pin for fast replacement of cutting wheels

BTC200R

SPECIFICATIONS

TUBE CUTTERS		
ITEM	**SPECIFICATIONS**	**DESCRIPTION**
BTC200	1/8”-7/8”OD	TUBE CUTTER
BTC200R	1/8”-7/8”OD	RATCHET TUBE CUTTER
BTC300	3/16” - 1-1/4” OD	TUBE CUTTER
GEAR PULLERS		
BTLGP4	4” 3	JAW GEAR PULLER
BTLGP7	7” 3	JAW GEAR PULLER

Patented design enables fast configuration of two or three puller arms for inward or outward gripping positions.

BTLGP4

TUBE EXPANDER KIT

BTLE9

Includes 1/4" + 5/16" Expander Heads

RATCHET TUBE BENDER

BTB300

- Easy to Use
- Color Code System
- Solid Aluminum Mandrels
- Reverse Bend Mechanism

Patented 2 position handle

BTB12

Lightweight Design
R410A Capable

BFT850FN

FLARING TOOLS		
ITEM	**SPECIFICATIONS**	**DESCRIPTION**
BFT850FN	3/16, 1/4, 5/16, 3,8, 1/2, 5/8, 3/4" OD	LIGHT WEIGHT CONCENTRIC FLARING TOOL
TUBE EXPANDER		
BTLE9	1/4, 5/16, 3/8, 1/2, 5/8, 3/4, 7/8, 1, 1-1/8" OD	PREMIUM TUBE EXPANDING KIT
TUBE BENDER		
BTB300	1/4, 5/16, 3/8, 1/2, 5/8, 3/4, 7/8" OD	RATCHET TUBE BENDER W/ REVERSE OPTION
LEVER TUBE BENDERS		
BTB06	3/8 OD	PREMIUM LEVER TUBE BENDER
BTB08	1/2 OD	PREMIUM LEVER TUBE BENDER
BTB10	5/8 OD	PREMIUM LEVER TUBE BENDER
BTB12	3/4 OD	PREMIUM LEVER TUBE BENDER
BTB14	7/8 OD	PREMIUM LEVER TUBE BENDER
DEBUR TOOL		
BTLDB3	PREMIUM BUILT DEBURING TOOL	

SPECIALTY HAND TOOLS

COMPLETE TOOL KITS FOR FAST, CONVENIENT REPAIRS

SPECIALTY HAND TOOLS

TLB410A TOOL KIT

R-410A Ductless mini-split tool kit with Triple-Seal 2 valve manifold (MEHP5E) and metric torque wrench set

TLB410AC2 TOOL KIT

R-410A Ductless mini-split tool kit with BlackMax Black & Chrome 2 valve manifold (MBH4P5EZ) and metric torque wrench set

TLB410AC TOOL KIT

R-410A Ductless mini-split tool kit with BlackMax Black & Chrome 2 valve manifold (MBH5P5Z) and metric torque wrench set

CPS® EXTRA DURABLE TOOL BAGS

Organize your tools with care with this extra strong, premium built series of tool bags from CPS.

TLBAG1 TLBAG2 TLBAG3

ITEM	DESCRIPTION
TLB410A	Universal R-410A Service Tool Kit 1/4" & 5/16" (1/2"-20 UNF) Triple-Seal MEHP5E manifold, metric torque set
TLB410AC	Universal R-410A Service Tool Kit 1/4" & 5/16" (1/2"-20 UNF) BlackMax MBH5P5Z manifold
TLB410AC2	Universal R-410A Service Tool Kit 1/4" & 5/16" (1/2"-20 UNF) BlackMax MBH4P5EZ manifold
TLB410SAE	Universal R-410A Service Tool Kit 1/4" & 5/16" (1/2"-20 UNF) Triple-Seal MEHP5E manifold, SAE torque set
CPS® TOOL BAGS	
TLBAG1	Square Tool Organizer
TLBAG2	16" Rubber Bottom Tool Organizer
TLBAG3	Tool Belt Tool Organizer

SPECIFICATIONS

TLB410SAE TOOL KIT

R-410A Ductless mini-split tool kit with Triple-Seal 2 valve manifold (MEHP5E) and SAE torque wrench set

SPECIALTY HAND TOOLS

PRO-SET® 6-IN-1 AUTO-LOADING SCREWDRIVER

- Patented auto loading bit design
- 6 replaceable industrial grade 1/4” hex bits
- Includes standard valve core tool bit
- Magnetic head holds fastener in place
- Ergonomic high impact housing design
- Standard 1/4” hex drive

TLSD1

PRO-SET® SPECIALTY HEX KEY WRENCH SETS

TLSWH

Inch Hex Key Set:
3/32”,7/64”, 1/8”,
9/64”, 5/32”, 3/16”,
7/32” and 1/4” (Nickel Plated Finish)

TLSWHM

Metric Hex Key Set:
1.5, 2, 2.5, 3, 4,
5, 6, 8mm
(Nickel Plated Finish)

TLSWT

Torx Wrench Set:
(Nickel Plated Finish)

PRO-SET® SWAGING / PINCH-OFF TOOLS

TLPORR

Pinch-Off tool & rerounds tubing on
1/4”, 5/16”, 3/8”, and 1/2”
Copper and tubing

PRO-SET® TLPP SERVICE PLIER

TLPP

Tube Piercing Pliers 1/4”

TLPK

Swage Punch Tool

PRO-SET® TLSWL

TLSWL

124 Service Wrench
1/4” - 3/16” SQ x 9/16”
1/2” HEX

SPECIALTY HAND TOOLS

TLFC6 UNIVERSAL 6 SIDED ALL PURPOSE FIN STRAIGHTENING TOOL

Repair bent condenser fins with the TLFC6 Universal 6 sided fin comb straightening tool.

TLFC2 FIN STRAIGHTENING TOOL

Fin Straightener with large durable, easy grip handle.

PRO-SET® INSPECTION MIRRORS

SPECIFICATIONS

ITEM	DESCRIPTION
TLMIR2	Circular Telescoping Mirror ø 2.24"
TLMIR3	Rectangular Telescoping Mirror 3.5 x 2.12"
TLMIR4	Oval Pocket Mirror 2 x .98"
TLXMIR2	Replacement Mirror Head for TLMIR2
TLXMIR3	Replacement Mirror Head for TLMIR3
TLXMIR4	Replacement Mirror Head for TLMIR4

SOLENOID MAGNET

The TLMKC18 is designed to manually open solenoid valves by magnetically lifting the stem assembly and plunger. Simply slide the TLMKC18 over the valve's enclosing tube and the industrial grade magnets incorporated inside the rugged ABS plastic housing does the rest. It is an ideal tool for trouble shooting/servicing both direct connected or pilot operated 2-way solenoid, 3-way reclaim or 4-way reversing valves.

* 0.75"/18mm opening fits all common manufactured valves

COMPACT MAGNETIZER/DEMAGNETIZER

Use the TLMAG1 to magnetize tools in order to keep small screws and nuts in position, especially helpful when working in confined spaces, or demagnetize tools when working on or near electronic circuit boards. Simply insert a screwdriver or nut driver into the (+) opening, slowly draw it out and it's magnetized. Leave the magnetizer on the tool for extra strength. To demagnetize, slowly draw the tool through the smallest area of the (-) opening. The TLMAG1 is an essential tool for the professional and do-it-yourselfer alike.

- Instantly Magnetize or Demagnetize Steel Tools & Parts
- Incorporates Two C5 Industrial Strength Magnets
- Impact Resistant ABS Molded Plastic
- No Batteries or Electricity Required
- Compact Design: 2" x 2" x 1"

SPECIALTY HAND TOOLS

SUPER-STRONG TOOL THAT EXCEEDS ANSI SPECIFICATIONS PROVIDING YEARS OF SERVICE!

ADJUSTABLE HANDLE WRENCH

- Patented Light Weight Composite Handle Design
- Ergonomic, Comfortable Grip Reduces Fatigue
- Wide Jaw Opening With 45% More Torque
- Precision Machined for Smooth Operation
- Durable and Environment-Resistant
- One Year Warranty

TLWA06	TLWA08	TLWA10	TLWA12
Size: 6”	Size: 8”	Size: 10”	Size: 12”
Jaw Capacity: 15/16” / 24mm	Jaw Capacity: 1 1/8” / 29mm	Jaw Capacity: 1 5/16” / 33mm	Jaw Capacity: 1 1/2” / 38mm

DUCT KNIVES

Used to fabricate fiberglass duct board. Stainless steel double edge resharpenable blade facilitates easy piercing for inside cuts. The double edge is also ideal for tapping into and trimming flex duct. Available with either ergonomic cushioned or a comfortable walnut wooden handle.

TLDKRH
6” (152 mm.)

TLDKWH - 6” (152 mm.)
Net Weight:5 oz. (142 g.)

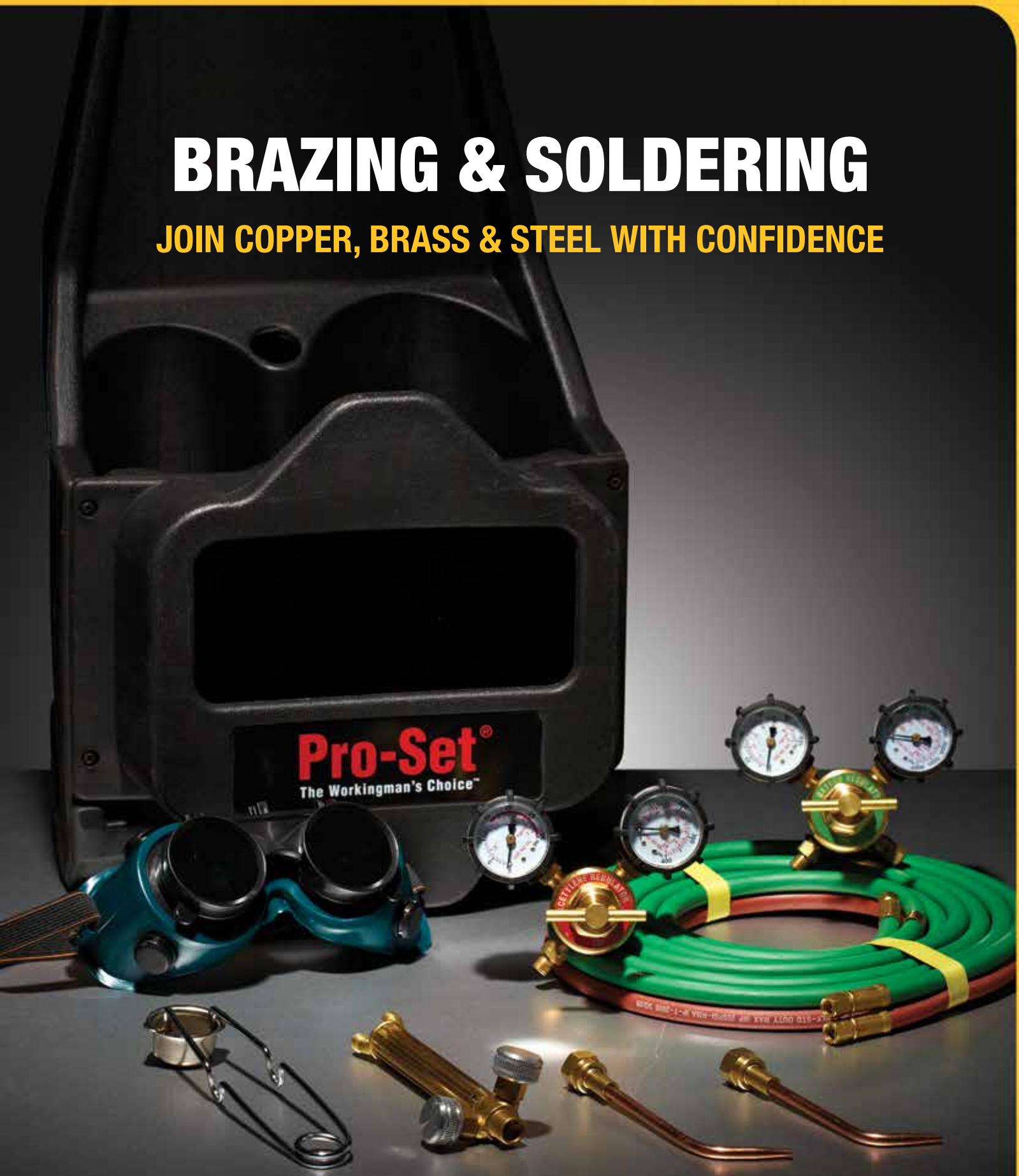
RECHARGEABLE ANODIZED ALUMINUM LED WORK LIGHT

Simply the best work light you will ever own, the TLWL53A is precision machined from aircraft grade aluminum and anodized for long life. Fifty three proprietary high output LEDs are incorporated in the work light segment with a 1W Luxeon LED integrated in the top. A powerful 2500mAh Ni-Mh rechargeable battery keeps the lights burning for hours; 7-8 hours for Luxeon spot, 4-5 hours for 53 white LEDs. The professional quality and intense output of the TLWL53A outperforms many competitive units incorporating 70 or more standard LEDs. Ideal for air conditioning contractors municipalities, law enforcement, fire fighters, automotive technicians, and wherever else a high performance, professional, durable work light is needed.

- Rugged Anodized Aluminum Body
- Super Bright 1W Luxeon Spot
- 53 Proprietary High Lumen Output LEDs
- Integrated 2500mAh 3.5V Rechargeable Battery
- Strong magnetic base for attaching to metal surfaces
- Universal UL/CUL Electronic Wall and Car Chargers Included
- Superior Durability and Shock Resistance
- High Quality Reflector Lens
- Wall and Car charger Included
- One Year Warranty

BRAZING & SOLDERING

JOIN COPPER, BRASS & STEEL WITH CONFIDENCE



BRAZING & SOLDERING

PREMIUM OXY-ACETYLENE BRAZING OUTFIT

Complete Soldering & Brazing full Workstation Tool Kit

BRHVACR1

BRHVACR1 PRO-SET® OXY-ACETYLENE BRAZING KIT:

Brazes up to 1" copper tubing and welds up to 1/8" steel. The **PRO-SET BRHVACR1 OxyAcetylene Welding/Brazing Kit (UL Listed) comes with oxy regulator, acetylene regulator, torch handle, torch tips, goggles, hoses, plastic tote and check valves.**

Includes:

- Torch handle
- Oxygen regulator
- Acetylene regulator
- Brazing tips
- Check valves
- Striker
- Goggles
- 12.5' twin hose
- Carrying tote
- Circular storage case

PREMIUM INTERCHANGEABLE TIPS

Be Brazen, with our new Pro-Set® Workingman's Choice Torch...

BRHT2 PRO-SET® HAND TORCH:

Auto-Ignite Hand Torch for MAPP, PROPANE or PROPYLENE and 3 changeable tips with plastic case

BRHT2

TORCH SPECIFICATIONS

Specifications	BRHT1	BRHT2	BRHT5	BRHTS1A	BRHTPKIT
Flame Control	Adjustable	Adjustable	Adjustable	Adjustable	Adjustable
For use with	MAPP®, Propane or Propylene	MAPP®, Propane or Propylene	MAPP®, Propane or Propylene	MAPP®, Propane or Propylene	MAPP®, Propane or Propylene
Inlet Connection	CGA600 Inlet Connection	CGA600 Inlet Connection	CGA600 Inlet Connection	CGA600 Inlet Connection	CGA600 Inlet Connection
Construction	Cast Aluminum & stainless steel burn tube	Reinforced Plastic & stainless steel burn tube	Brass regulator, composite handle & stainless steel burn tube	Brass regulator & stainless steel burn tube	All brass construction
Other	Flame lock Precise flame adjustment, flame lock button	tips & storage case with space for 2 cylinders	New brass regulator and 5ft hose length.	Torch tube swivels 360 degrees, operates in any position.	Pencil flame torch, general heating and round tip included

BRHT1

BRHT1 HAND TORCH:

Auto-Ignite Hand Torch (Cast Aluminum) for disposable 1lbs bottles) For MAPP, PROPANE or PROPALYNE

BRHT5 HAND TORCH:

Auto-Ignite Hand Torch Kit w/5ft. Hose & Valve For MAPP, PROPANE or PROPALYNE

BRHT5

CPS®

Product Guarantee

CPS guarantees that all products are free of manufacturing and material defects for one year from the date of purchase. If a product should fail during the guarantee period due to defective material or workmanship, it will be repaired or replaced (at our office) at no charge. This guarantee does not apply to products that have been altered, misused or are in need of field service maintenance. All repaired products will carry an independent 90 day warranty. The LS3000 and LS790B carry a 2 year warranty and the LS780B has a 1 year warranty.

www.cpsproducts.com